

SEQUENCE LISTING

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<120> Mu-Conopeptides

<130> 2314-242

<150> US 60/219,619

<151> 2000-07-21

<150> US 60/245,157

<151> 2000-11-03

<150> US 60/264,319

<151> 2001-01-29

<150> US 60/277,270

<151> 2001-03-21

<160> 520

<170> PatentIn version 3.0

<210> 1

<211> 280

<212> DNA

<213> Conus arentus

<400> 1

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agagcgtatg caggacgact ttataactga gcatcatccc ctgtttgatc ctgtcaaacg 180

gtgttgcgag aggccatgca acataggatg cgtaccttgt tgtaaatgac cagctttgtc 240

atcgcggcct catcaagcga ataagtaaaa cgattgcagt 280

<210> 2

<211> 67

<212> PRT

<213> Conus arentus

<400> 2

Met Met Ser Lys Leu Gly Val Phe Leu Thr Ile Cys Met Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Phe Ile Thr Glu His His Pro Leu Phe

35 40 45
 Asp Pro Val Lys Arg Cys Cys Glu Arg Pro Cys Asn Ile Gly Cys Val
 50 55 60
 Pro Cys Cys
 65
 <210> 3
 <211> 14
 <212> PRT
 <213> Conus arentus
 <220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5 and 12 is Pro or Hy
 <400> 3
 Cys Cys Xaa Arg Xaa Cys Asn Ile Gly Cys Val Xaa Cys Cys
 1 5 10
 <210> 4
 <211> 244
 <212> DNA
 <213> Conus atlanticus
 <400> 4
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 actgctcttc cgtcggatga agatcaaccg gtacaccgac ctgcagagcg tatgcaggac 120
 atttcatctg atcaacatct cttctttgat ctcataaac ggtgctgcga gttgccatgc 180
 gggccaggct tttgcgtccc ttgttgctga catcaataac gtgttgatga ccaactttct 240
 cgag 244
 <210> 5
 <211> 69
 <212> PRT
 <213> Conus atlanticus
 <400> 5
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Val His
 20 25 30
 Arg Pro Ala Glu Arg Met Gln Asp Ile Ser Ser Asp Gln His Leu Phe
 35 40 45
 Phe Asp Leu Ile Lys Arg Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe
 50 55 60
 Cys Val Pro Cys Cys
 65
 <210> 6
 <211> 15
 <212> PRT
 <213> Conus atlanticus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 8
 and 13 is Pro or Hy

<400> 6
 Cys Cys Xaa Leu Xaa Cys Gly Xaa Gly Phe Cys Val Xaa Cys Cys
 1 5 10 15

<210> 7
 <211> 310
 <212> DNA
 <213> Conus aurisiacus

<400> 7
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 agagcgtatg caggacgaca tttcatctga gcagcatccc ttgtttaatc agaaaagaat 180
 gtgttgccggc gaaggccgga aatgccccag ctatttcaga aacagtcaga tttgtcattg 240
 ttgttaaattg acaacgtgtc gatgaccaac ttogttatca cgactaatga ataagtaaaa 300
 cgattgcagt 310

<210> 8
 <211> 74
 <212> PRT
 <213> Conus aurisiacus

<400> 8
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
 20 25 30
 Glu Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45
 Asn Gln Lys Arg Met Cys Cys Gly Glu Gly Arg Lys Cys Pro Ser Tyr
 50 55 60
 Phe Arg Asn Ser Gln Ile Cys His Cys Cys
 65 70

<210> 9
 <211> 22
 <212> PRT
 <213> Conus aurisiacus
 <220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 i
 s Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr,
 di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 9
 Met Cys Cys Gly Xaa Gly Arg Lys Cys Xaa Ser Xaa Phe Arg Asn Ser
 1 5 10 15
 Gln Ile Cys His Cys Cys

20

<210> 10
 <211> 257
 <212> DNA
 <213> Conus aurisiacus

<400> 10
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtttgcttct gtttccctt 60
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 gacatttcat ctgagcagca tcgcttggtc aatcagaaaa gaagggtgctg ccggtggcca 180
 tgcccccgac aaatcgacgg tgaatattgt ggctgttgcc ttggatgata accgtgttga 240
 tgaccaactt tctcgag 257

<210> 11
 <211> 75
 <212> PRT
 <213> Conus aurisiacus

<400> 11
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Leu Pro Ile Asp Gly Asp Gln Ser Val Asp
 20 25 30
 Arg Pro Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Arg
 35 40 45
 Leu Phe Asn Gln Lys Arg Arg Cys Cys Arg Trp Pro Cys Pro Arg Gln
 50 55 60
 Ile Asp Gly Glu Tyr Cys Gly Cys Cys Leu Gly
 65 70 75

<210> 12
 <211> 19
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 13 is Glu or gamma-carboxy Glu; Xaa at residue 3 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or Bromo Trp; Xaa at residue 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 12
 Cys Cys Arg Xaa Xaa Cys Xaa Arg Gln Ile Asp Gly Xaa Xaa Cys Gly
 1 5 10 15

Cys Cys Leu

<210> 13
 <211> 262
 <212> DNA
 <213> Conus aurisiacus

<400> 13
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actgcttttc cgatggatgg agatcaacct gcagaccaac ctgcagatcg tatgcaggac 120
gacatttcat ctgagcagta tcccttgttt gataagagac aaaagtgttg cactgggaag 180
aaggggtcat gctccggcaa agcatgcaaa aatctcaa atgtgctctgg acgataacgt 240
gttgatgacc aactttctcg ag 262

<210> 14
<211> 78
<212> PRT
<213> Conus aurisiacus

<400> 14
Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15
Leu Phe Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp
20 25 30
Gln Pro Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro
35 40 45
Leu Phe Asp Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys
50 55 60
Ser Gly Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
65 70 75

<210> 15
<211> 23
<212> PRT
<213> Conus aurisiacus

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 1 is Gln or pyro-Glu

<400> 15
Xaa Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15
Lys Asn Leu Lys Cys Cys Ser
20

<210> 16
<211> 232
<212> DNA
<213> Conus aurisiacus

<400> 16
ggatccatga tgtctaaact gggagtcttg ctgacctct gtctgcttct gtttcactt 60
actgctgttc cgctggatgg agatcaacct ctagaccgac acgcggagcg tatgcatgat 120
ggcatttcac ctaaacgcca tccctggttt gatcccgta aacggtgttg caaggtgcaa 180
tgcgagtctt gcacccttg ttgctaactgt gttgatgacc aactttctcg ag 232

<210> 17
<211> 68
<212> PRT
<213> Conus aurisiacus

<400> 17

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Leu Asp
20 25 30

Arg His Ala Glu Arg Met His Asp Gly Ile Ser Pro Lys Arg His Pro
35 40 45

Trp Phe Asp Pro Val Lys Arg Cys Cys Lys Val Gln Cys Glu Ser Cys
50 55 60

Thr Pro Cys Cys
65

<210> 18

<211> 13

<212> PRT

<213> Conus aurisiacus

<220>

<221> PEPTIDE

<222> (1)..(13)

<223> Xaa at residue 7 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp

<400> 18

Cys Cys Lys Val Gln Cys Xaa Ser Cys Thr Xaa Cys Cys
1 5 10

<210> 19

<211> 241

<212> DNA

<213> Conus bandus

<400> 19

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtatgcttct gtttcccctc 60

actgctcttc cgatggatgg agatcaacct gcagaccgac ctgcagagcg tagtcaggac 120

gtttcatctg aacagcatcc ctgttttgat ccogtcaaac ggtgttgcaa ctggccatgc 180

tccatgggat gcatcccttg ttgctactat taataacgtg ttgatgacca actttctcga 240

g 241

<210> 20

<211> 70

<212> PRT

<213> Conus bandus

<400> 20

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Met Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp
20 25 30

Arg Pro Ala Glu Arg Ser Gln Asp Val Ser Ser Glu Gln His Pro Leu
35 40 45

Phe Asp Pro Val Lys Arg Cys Cys Asn Trp Pro Cys Ser Met Gly Cys
50 55 60

Ile Pro Cys Cys Tyr Tyr
65 70

<210> 21
<211> 16
<212> PRT
<213> Conus bandus

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 4 is Trp or bromo-Trp; Xaa at residue 15 and 16 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 21
Cys Cys Asn Xaa Xaa Cys Ser Met Gly Cys Ile Xaa Cys Cys Xaa Xaa
1 5 10 15

<210> 22
<211> 298
<212> DNA
<213> Conus betulinus

<400> 22
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agagcgtatg caggacattt catctgaaca gcatcccttg ttgatcccg tcaaacggtg 180
ttgcgaattg ccatgccatg gatgcgtccc ttgttgctgg ccttaataac gtgtggatga 240
ccaactgtgt tatcacggcc acgtcaagtg totaatgaat aagtaaaatg attgcagt 298

<210> 23
<211> 67
<212> PRT
<213> Conus betulinus

<400> 23
Met Met Ser Lys Leu Gly Val Leu Leu Thr Phe Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Ile Ser Ser Glu Gln His Pro Leu Phe Asp
35 40 45

Pro Val Lys Arg Cys Cys Glu Leu Pro Cys His Gly Cys Val Pro Cys
50 55 60

Cys Trp Pro
65

<210> 24
<211> 15
<212> PRT
<213> Conus betulinus

<220>
<221> PEPTIDE
<222> (1)..(15)
<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 1

1 and 15 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp

<400> 24

Cys Cys Xaa Leu Xaa Cys His Gly Cys Val Xaa Cys Cys Xaa Xaa
1 5 10 15

<210> 25

<211> 298

<212> DNA

<213> Conus betulinus

<400> 25

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agagcgtatg caggacattt cacctgaaca gcatccctcg ttgatcccg tcaaacggtg 180
ttgcgggctg ccatgcaatg gatgcgtccc ttgttgctgg ccttcataac gtgtggacga 240
ccaactttgt tatcacggcc acgtcaagtg tctgatgaat aagtaaaacg attgcagt 298

<210> 26

<211> 68

<212> PRT

<213> Conus betulinus

<400> 26

Met Met Ser Lys Leu Gly Val Leu Leu Thr Phe Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg His
20 25 30
Ala Glu Arg Met Gln Asp Ile Ser Pro Glu Gln His Pro Ser Phe Asp
35 40 45

Pro Val Lys Arg Cys Cys Gly Leu Pro Cys Asn Gly Cys Val Pro Cys
50 55 60

Cys Trp Pro Ser
65

<210> 27

<211> 16

<212> PRT

<213> Conus betulinus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 5, 11 and 15 is Pro or Hyp; Xaa at residue 14 is T
rp or bromo-Trp

<400> 27

Cys Cys Gly Leu Xaa Cys Asn Gly Cys Val Xaa Cys Cys Xaa Xaa Ser
1 5 10 15

<210> 28

<211> 282

<212> DNA

<213> Conus betulinus

<400> 28

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gcttctgttt ccctttactg ctcttccgct ggatggagat caacctgcag accaacctct 120
 agagcgcatg cagtatgaca tgttacgtgc agtgaatccc tggtttgatc cegtcaaaag 180
 gtgctgctcg aggaactgog cagtatgcat cccttggtgc ccgaattggc cagcttgatt 240
 atcgcggccca agagtctaata gaataagtaa aacgattgca gt 282

<210> 29
 <211> 71
 <212> PRT
 <213> Conus betulinus

<400> 29
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Tyr Met Leu Leu Phe
 1 5 10 15

Pro Phe Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Leu Glu Arg Met Gln Tyr Asp Met Leu Arg Ala Val Asn Pro Trp Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Ser Arg Asn Cys Ala Val Cys Ile Pro
 50 55 60

Cys Cys Pro Asn Trp Pro Ala
 65 70

<210> 30
 <211> 18
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 11, 14 and 17 is Pro or Hyp; Xaa at residue 16 is
 Trp or bromo-Trp

<400> 30
 Cys Cys Ser Arg Asn Cys Ala Val Cys Ile Xaa Cys Cys Xaa Asn Xaa
 1 5 10 15

Xaa Ala

<210> 31
 <211> 325
 <212> DNA
 <213> Conus bullatus

<400> 31
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 agagcgatg caggacgaca ttcatctga gcagaattcc ttgcttgaga agagagttac 180
 tgacaggtgc tgcaaagggga agaggggaatg cggcagatgg tgcagagatc actcgcggtg 240
 ttgcggtcga cgataagctg ttgatgacca gctttgttat cacggctaca tcaagtgtct 300
 agtgaataag taaaatgatt gcagt 325

<210> 32

<211> 77
 <212> PRT
 <213> Conus bullatus

<400> 32
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 1 5 10 15
 Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asn Ser Leu Leu
 35 40 45
 Glu Lys Arg Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Glu Cys Gly
 50 55 60
 Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 33
 <211> 23
 <212> PRT
 <213> Conus bullatus
 <220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 11 is Glu or gamma-carboxy Glu; Xaa at residue 15
 is Trp or bromo-Tr

<400> 33
 Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Xaa Cys Gly Arg Xaa Cys
 1 5 10 15
 Arg Asp His Ser Arg Cys Cys
 20

<210> 34
 <211> 326
 <212> DNA
 <213> Conus bullatus

<400> 34
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 gcttctgttt cccctttttg ctcttcggca ggatggagat caacctgcag accgacctgc 120
 agagcgtatg caggatgaca ttcatctga gcagaatccc ttgcttgaga agagagttgg 180
 tgacaggtgc tgcaaaggga agagggggtg cggcagatgg tgcagagato actcacgttg 240
 ttgcggtcga cgataacgtg ttgatgacca gctttgttat cacggctaca tcaagtgtct 300
 tagtgattaa gtaaaacgat tgcagt 326

<210> 35
 <211> 77
 <212> PRT
 <213> Conus bullatus

<400> 35
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Phe Ala Leu Arg Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asn Pro Leu Leu
35 40 45

Glu Lys Arg Val Gly Asp Arg Cys Cys Lys Gly Lys Arg Gly Cys Gly
50 55 60

Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
65 70 75

<210> 36

<211> 23

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 15 is Trp or bromo-Trp

<400> 36

Val Gly Asp Arg Cys Cys Lys Gly Lys Arg Gly Cys Gly Arg Xaa Cys
1 5 10 15

Arg Asp His Ser Arg Cys Cys
20

<210> 37

<211> 331

<212> DNA

<213> Conus bullatus

<400> 37

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gcttctgttt cccctttttg ctcttccgca ggatggagat caacctgcag accgacctgc 120

agagcgtatg caggacgaca tttcatctga gcagaatccc ttgcttgaga agagagttgg 180

tgaaaggtgc tgcaaaaacg ggaagagggg gtgcggcaga tgggtgcagag atcactcacg 240

ttgttgcggt cgacgataac gtgttgatga ccgaggcttt cgttatcacg gctacatcaa 300

gtgtctagtg aataagtaaa acgattgcag t 331

<210> 38

<211> 78

<212> PRT

<213> Conus bullatus

<400> 38

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asn Pro Leu Leu
35 40 45

Glu Lys Arg Val Gly Glu Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys
50 55 60

Gly Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg

65

70

75

<210> 39

<211> 24

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 16 is Trp or bromo-Trp

<400> 39

Val Gly Xaa Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys Gly Arg Xaa
1 5 10 15Cys Arg Asp His Ser Arg Cys Cys
20

<210> 40

<211> 337

<212> DNA

<213> Conus bullatus

<400> 40

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gcttctgttt cccctttttg ctcttcgca ggacggagat caacctgcag accgacctgc 120

agagcgtatg caggacgacc ttcatctga gcagcatccc ttgtttgaga agagaattgt 180

tgacaggtgc tgcaacaaag ggaacgggaa gagggggtgc agcagatggt gcagagatca 240

ctcacgttgt tgcggtcgac gatgaactgt tgatgaccga ggctttggtt atcacggcta 300

catcaagtgt ctagtgaata agtaaaacga ttgcagt 337

<210> 41

<211> 80

<212> PRT

<213> Conus bullatus

<400> 41

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Phe
1 5 10 15Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30Ala Glu Arg Met Gln Asp Asp Leu Ser Ser Glu Gln His Pro Leu Phe
35 40 45Glu Lys Arg Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg
50 55 60Gly Cys Ser Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
65 70 75 80

<210> 42

<211> 26

<212> PRT

<213> Conus bullatus

<220>

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<221> PEPTIDE
 <222> (1)..(26)
 <223> Xaa at residue 18 is Trp or bromo-Trp

<400> 42
 Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg Gly Cys Ser
 1 5 10 15
 Arg Xaa Cys Arg Asp His Ser Arg Cys Cys
 20 25

<210> 43
 <211> 337
 <212> DNA
 <213> Conus bullatus

<400> 43
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 gcttctgttt cccctttttg ctcttccgca ggatggagat caacctgcag accgacctgc 120
 tgagcgtatg caggacgaca ttcatctga gcggaatccc ttgtttgaga agagcgttgg 180
 tttatattgc tgccgaccca aaccaacgg gcagatgatg tgcgacagat ggtgcgaaaa 240
 aaactcacgt tgttgcggtc gacgataatg tgttgatgac cagctttgtt atcaaggcta 300
 catcaagtat ctagtgaata agtaaaacga ttgcagt 337

<210> 44
 <211> 77
 <212> PRT
 <213> Conus bullatus

<400> 44
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Asn Pro Leu Phe Glu Lys
 35 40 45
 Ser Val Gly Cys Cys Arg Pro Lys Pro Asn Gly Gln Met Met Cys Asp
 50 55 60
 Arg Trp Cys Glu Lys Asn Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 45
 <211> 27
 <212> PRT
 <213> Conus bullatus

<220>
 <221> PEPTIDE
 <222> (1)..(27)
 <223> Xaa at residue 21 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 19 is Trp or bromo-Trp; Xaa at residue 4 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 45
 Val Gly Leu Xaa Cys Cys Arg Xaa Lys Xaa Asn Gly Gln Met Met Cys

1 5 10 15

Asp Arg Xaa Cys Xaa Lys Asn Ser Arg Cys Cys
20 25

<210> 46
<211> 323
<212> DNA
<213> Conus bullatus
<400> 46
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gcttctgttt ccccttactg ctcttcgat ggatggagat caatctgtag accgacctgc 120
agaacgtatg caggacgacc ttcatctga gcagcatccc ttgtttgttc agaaaagaag 180
gtgttgcggc gaaggcttga catgccccag atattggaaa aacagtcaga tttgtgcttg 240
ttgttaaagt acaacgtgtc gatgaccaac ttcggtatca cgactacgcc aagtgtctaa 300
tgaataagta aaacgattgc agt 323

<210> 47
<211> 74
<212> PRT
<213> Conus bullatus
<400> 47
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15
Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
20 25 30
Ala Glu Arg Met Gln Asp Asp Leu Ser Ser Glu Gln His Pro Leu Phe
35 40 45
Val Gln Lys Arg Arg Cys Cys Gly Glu Gly Leu Thr Cys Pro Arg Tyr
50 55 60
Trp Lys Asn Ser Gln Ile Cys Ala Cys Cys
65 70

<210> 48
<211> 22
<212> PRT
<213> Conus bullatus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 is Pro or Hyp; Xaa at residue 13 is Trp or bromo-Trp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 48
Arg Cys Cys Gly Xaa Gly Leu Thr Cys Xaa Arg Xaa Xaa Lys Asn Ser
1 5 10 15
Gln Ile Cys Ala Cys Cys
20

<210> 49
<211> 322

<212> DNA

<213> Conus bullatus

<400> 49

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caagagggat cgatagcagt tcatgatgtc taaactggaa gtcttggtga ccatctgtct      60
gcttctgttt cccctttttg ctcttcgcga ggatggagat caacctgcag accgacctgc      120

tgagcgtatg caggacgaca tttcatctga gcaggatccc ttgtttgttc agaaaagaag      180

gtgttgccgc gaaggcttga catgccccag atattggaaa aacagtcaga tttgtgcttg      240

ttgttaaagt acaacgtgtg atgaccaact tcggtatcac gactacgcc aagtgtotaat      300

gaataagtaa aacgattgca gt                                             322

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<210> 50

<211> 74

<212> PRT

<213> Conus bullatus

<400> 50

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Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1           5           10           15

Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
          20           25           30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asp Pro Leu Phe
          35           40           45

Val Gln Lys Arg Arg Cys Cys Gly Glu Gly Leu Thr Cys Pro Arg Tyr
          50           55           60

Trp Lys Asn Ser Gln Ile Cys Ala Cys Cys
65           70

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<210> 51

<211> 22

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 is Pro or Hyp; Xaa at residue 13 is Trp or bromo-Trp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 51

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Arg Cys Cys Gly Xaa Gly Leu Thr Cys Xaa Arg Xaa Xaa Lys Asn Ser
1           5           10           15

Gln Ile Cys Ala Cys Cys
          20

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<210> 52

<211> 238

<212> DNA

<213> Conus capitaneus

<400> 52

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ggatccatga tgtctaaact gggagtcttg gtgaccatct gcctgcttct gtttcccctt      60

gctgcttttc cactggatgg aatcaacct gcagaccacc ctgcaaagcg tacgcaagat      120

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gacagttcag ctgccctgat caatacctgg attgatcatt cccattcttg ctgcagggac 180
 tgcggtgaag attgtgttgg ttgttgccgg taacgtgttg atgaccaact ttctcgag 238

<210> 53
 <211> 70
 <212> PRT
 <213> Conus capitaneus

<400> 53
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Val Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Ala Ala Phe Pro Leu Asp Gly Asn Gln Pro Ala Asp
 20 25 30
 His Pro Ala Lys Arg Thr Gln Asp Asp Ser Ser Ala Ala Leu Ile Asn
 35 40 45
 Thr Trp Ile Asp His Ser His Ser Cys Cys Arg Asp Cys Gly Glu Asp
 50 55 60
 Cys Val Gly Cys Cys Arg
 65 70

<210> 54
 <211> 15
 <212> PRT
 <213> Conus capitaneus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 8 is Glu or gamma-carboxy Glu

<400> 54
 Ser Cys Cys Arg Asp Cys Gly Xaa Asp Cys Val Gly Cys Cys Arg
 1 5 10 15

<210> 55
 <211> 323
 <212> DNA
 <213> Conus characteristicus

<400> 55
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 gcttctgttt ccccttactg ctcttccaat ggatggagat caacctgcag accaacctgc 120
 agatcgtatg caggacgaca ttcatctga gcagtatccc ttgtttgata tgagaaaaag 180
 gtgttgccggc cccggcgggt catgcccggt atatttcaga gacaatttta tttgtggttg 240
 ttgttaaagt acaacgtgtc gatgaccaac ttcattatca cgactacgcc aagtgtctaa 300
 tgaataagta aaatgattgc agt 323

<210> 56
 <211> 74
 <212> PRT
 <213> Conus characteristicus

<400> 56


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<210> 57
<211> 21
<212> PRT
<213> Conus characteristicus
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<400> 57
Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp Asn Phe
1          5          10          15
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<210>	58
<211>	316
<212>	DNA
<213>	Conus characteristicus

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<210> 59
<211> 75
<212> PRT
<213> Conus characteristicus
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<400> 59
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1          5          10          15
Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro
          20          25          30
Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe

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<212> PRT
 <213> Conus characteristic

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 and 17 is
 Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
 pho-Ty

<400> 63
 Arg Cys Cys Arg Xaa Xaa Cys Xaa Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Xaa Lys

<210> 64
 <211> 292
 <212> DNA
 <213> Conus characteristic

<400> 64
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 atttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 acagcgtctg caggaccgca ttccaactga agatcatocc ttatttgatc ccaacaaacg 180
 gtgttgcccg ccggtggcat gcaacatggg atgcaagcct tgttgtggat gaccagcttt 240
 gttatcgagg tcttcatgaa gtgtcttaat gaataagtaa aatgattgca gt 292

<210> 65
 <211> 69
 <212> PRT
 <213> Conus characteristic

<400> 65
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Gln Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
 35 40 45
 Asp Pro Asn Lys Arg Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys
 50 55 60

Lys Pro Cys Cys Gly
 65

<210> 66
 <211> 15
 <212> PRT
 <213> Conus characteristic

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3, 4 and 13 is Pro or Hyp

<400> 66
 Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Lys Xaa Cys Cys

1 5 10 15

<210> 67
 <211> 293
 <212> DNA
 <213> Conus characteristicus

<400> 67
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 agagcgtctg catgaccgcc ttccaactga aaatcatccc ttatatgatc ccgtcaaacg 180
 gtgttgcgat gattcggaat gcgactattc ttgctggcct tgctgtatgt ttggataacc 240
 tttgttatcg cggcctcatc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 68
 <211> 71
 <212> PRT
 <213> Conus characteristicus

<400> 68
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45
 Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60
 Trp Pro Cys Cys Met Phe Gly
 65 70

<210> 69
 <211> 17
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is
 s Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at resid
 ue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr o
 r O-phospho-Ty

<400> 69
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Met
 1 5 10 15
 Phe

<210> 70
 <211> 232
 <212> DNA
 <213> Conus characteristicus

<400> 70
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccccctt 60

actgctgttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg taagcaggac 120
 gtttcatctg aacagcatcc cttctttgat cccgtcaaac ggtgttgccg ccggtgttac 180
 atgggatgca tcccttggtg cttttaacgt gttgatgacc aactttctcg ag 232

<210> 71
 <211> 68
 <212> PRT
 <213> Conus characteristicus

<400> 71
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30
 Arg Pro Ala Glu Arg Lys Gln Asp Val Ser Ser Glu Gln His Pro Phe
 35 40 45
 Phe Asp Pro Val Lys Arg Cys Cys Arg Arg Cys Tyr Met Gly Cys Ile
 50 55 60
 Pro Cys Cys Phe
 65

<210> 72
 <211> 14
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Tyr
 r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 72
 Cys Cys Arg Arg Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10
 <210> 73
 <211> 323
 <212> DNA
 <213> Conus circumcisis

<400> 73
 caagaaggat cgatagcagt tcatgatgtc taaactgggg gtattgttga ccatctgtct 60
 gttctgttt ccccttactg ctcttccaat ggatggagat caacctgcag accaacctgc 120
 agatcgtatg caggacgaca ttcatctga gcagtatccc ttgtttgata agagacgaaa 180
 gtgttgcggc aaagacgggc catgccccaa atatttcaaa gacaatttta tttgtggttg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttcgttatca cgattcgcca agtgtcttaa 300
 tgaataagta aaatgattgc agt 323

<210> 74
 <211> 74
 <212> PRT
 <213> Conus circumcisis

123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100

<400> 74

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Lys Arg Arg Lys Cys Cys Gly Lys Asp Gly Pro Cys Pro Lys Tyr
50 55 60

Phe Lys Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 75

<211> 23

<212> PRT

<213> Conus circumcissus

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 9 and 11 is Pro or Hyp; Xaa at residue 13 is Tyr,
125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
y

<400> 75

Arg Lys Cys Cys Gly Lys Asp Gly Xaa Cys Xaa Lys Xaa Phe Lys Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 76

<211> 293

<212> DNA

<213> Conus dalli

<400> 76

caagagggat cgatagcagt tcatgatgtc taaactggga gccttggtga ccatctgtct 60

acttctgttt tccctaactg ctgttccgct ggatggagat caacatgcag accaacctgc 120

agagcgtctg caggaccgcc ttccaactga aaatcatccc ttatatgata ccgtcaaacg 180

gtgttgcatg gattcggaat gcgactattc ttgctggcct tgctgtattt tatcataacc 240

tttggttatcg cggcctcatc aagtgtcaaa tgaataagta aaatgattgc agt 293

<210> 77

<211> 71

<212> PRT

<213> Conus dalli

<400> 77

Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Glu Arg Leu Gln Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
50 55 60

Trp Pro Cys Cys Ile Leu Ser
65 70

<210> 78
<211> 18
<212> PRT
<213> Conus dalli

<220>
<221> PEPTIDE
<222> (1)..(18)
<223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 78
Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
1 5 10 15

Leu Ser

<210> 79
<211> 299
<212> DNA
<213> Conus dalli

<400> 79
caagagggat c gatagcagt tcatgatgtc taaactggga gtcttggtga ccatttgtct 60
acttctgttt ccccttactg ctgttccact ggatggagat cagcctgcag accgacctgc 120
agagcgtatg caggacggca tttcatctga acatcatcca ttttttgatt cggtaaaaaa 180
gaaacaacag tgttgcccg cgggtggcatg caacatggga tgcgagcctt gttgtggatg 240
accagctttg ttatcgcggc tcatgaagtg tcctaataa taagtaaaac gattgcagt 299

<210> 80
<211> 72
<212> PRT
<213> Conus dalli

<400> 80
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu His His Pro Phe Phe
35 40 45

Asp Ser Val Lys Lys Lys Gln Gln Cys Cys Pro Pro Val Ala Cys Asn
50 55 60

Met Gly Cys Glu Pro Cys Cys Gly
65 70

<210> 81
<211> 17

<212> PRT
 <213> Conus dalli

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 5, 6 and 15 is Pro or Hyp

<400> 81
 Xaa Gln Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Xaa Xaa Cys
 1 5 10 15

Cys

<210> 82
 <211> 290
 <212> DNA
 <213> Conus dalli

<400> 82
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggtga tcatatgtct 60
 atttctgttt ccccttactg ctgttcagct caatggagat cagcctgcag accaatctgc 120
 agagcgtatg caggacaaaa tttcatctga acatcatccc ttttttgatc ccgtcaaacg 180
 ttgttgcaac ggggggtttt gccgcttcgg atgcacgcct tggtgttggt gaccagcttt 240
 gttatcgagg cctcatcaag tgtctaataa ataagtaaaa tgattgcagt 290

<210> 83
 <211> 69
 <212> PRT
 <213> Conus dalli

<400> 83
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Phe Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Gln Leu Asn Gly Asp Gln Pro Ala Asp Gln Ser
 20 25 30

Ala Glu Arg Met Gln Asp Lys Ile Ser Ser Glu His His Pro Phe Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys
 50 55 60

Thr Pro Cys Cys Trp
 65

<210> 84
 <211> 16
 <212> PRT
 <213> Conus dalli

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 13 is Pro or Hyp; Xaa at residue 16 is Trp or brom o-Tr

<400> 84
 Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys Thr Xaa Cys Cys Xaa
 1 5 10 15


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<400>      88
acctcaagag ggatcgatcg cagttcatga tgtctaaact gggagccttg ttgaccatct      60
gtctgcttct gtttcccatt actgctcttc tgatggatgg agatcagcct gcagaccgac      120
ctgcagagcg tacggaggat gacatttcat ctgactacat tccctgttgc aqttggccat      180
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gcccccgata ctccaacggt aaacttggtt gtttttggtg ccttggaatga taatgtgttg 240
 atgaccaact ttgttatcac ggctacgtca agtgtctact gaataagtaa aatgattgca 300
 gta 303

<210> 89
 <211> 67
 <212> PRT
 <213> Conus ermineus

<400> 89
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Ile Thr Ala Leu Leu Met Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Thr Glu Asp Asp Ile Ser Ser Asp Tyr Ile Pro Cys Cys
 35 40 45
 Ser Trp Pro Cys Pro Arg Tyr Ser Asn Gly Lys Leu Val Cys Phe Cys
 50 55 60

Cys Leu Gly
 65

<210> 90
 <211> 20
 <212> PRT
 <213> Conus ermineus

<220>
 <221> PEPTIDE
 <222> (1)..(20)
 <223> Xaa at residue 5 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or
 bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
 odo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 90
 Cys Cys Ser Xaa Xaa Cys Xaa Arg Xaa Ser Asn Gly Lys Leu Val Cys
 1 5 10 15

Phe Cys Cys Leu
 20

<210> 91
 <211> 241
 <212> DNA
 <213> Conus generalis

<400> 91
 ggatccatga tgtctaaaact gggagtcttg ttgaccatct gtctggttct gtttcccctt 60
 actgctcttc cactggatgg agaacaacct gtagaccgac atgccgagca tatgcaggat 120
 gacaattcag ctgcacagaa cccctgggtt attgccatca gacagtgttg cacgttctgc 180
 aactttggat gccaaccttg ttgcctcacc tgataacgtg ttgatgacca actttctoga 240
 g 241

<210> 92
 <211> 70
 <212> PRT

<213> Conus generalis

<400> 92

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
20 25 30

Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
35 40 45

Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys
50 55 60

Gln Pro Cys Cys Leu Thr
65 70

<210> 93

<211> 16

<212> PRT

<213> Conus generalis

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 is Pro or Hy

<400> 93

Xaa Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Xaa Cys Cys Leu Thr
1 5 10 15

<210> 94

<211> 241

<212> DNA

<213> Conus generalis

<400> 94

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctggttct gtttcccctt 60

actgctcttc cactggatgg agaacaacct gtagaccgac atgccgagca tatgcaggat 120

gacaattcag ctgcacagaa cccctgggtt attgccatca gacagtgttg cacgttctgc 180

aactttggat gccagccttg ttgcgtcccc tgataacgtg ttgatgacca actttctcga 240

g 241

<210> 95

<211> 70

<212> PRT

<213> Conus generalis

<400> 95

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
20 25 30

Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
35 40 45

Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys

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50 55 60

Gln Pro Cys Cys Val Pro
65 70

<210> 96
<211> 16
<212> PRT
<213> *Conus generalis*

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 and 16 is Pro or Hy

<400> 96
Xaa Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Xaa Cys Cys Val Xaa
1 5 10 15

<210> 97
<211> 862
<212> DNA
<213> *Conus geographus*

<400> 97
gtcgactcta gaggatccga caacaaagag tcaacccac tgccacgtca agagcgaagc 60
gccacagcta agacaagagg gatcgatagc agttcatgat gtctaaactg ggagtcttgt 120
tgaccatctg tctgcttctg tttccctta ctgctcttcc gatggatgga gatgaacctg 180
caaaccgacc tgtcgagcgt atgcaggaca acatttcac tgagcagtat cccttgtttg 240
agaagagacg agattgttgc actccgccga agaaatgcaa agaccgacaa tgcaaaccac 300
agagatgttg cgctggaoga taacgtgttg atgaccaact ttatcacggc tacgtcaagt 360
gtttagttaa taagtaaaat gattgcagtc ttgctcagat ttgcttttgt gttttggtct 420
aaagatcaat gaccaaaccg ttgttttgat gcggattgtc atatatttct cgattccaat 480
ccaacactag atgatttaat cagcatagat taattttcta tcaatgcctt gatttttcgt 540
ctgtcatatc agttttgttt atatttat ttctgtcact gtctacacaa acgcatgcat 600
gcacgcatgc acgcacacac gcacgcacgc tcgcacaaac atgcgcgcgc acgcacacac 660
acacacacac acacaaacac acacacaagc aatcacacaa ttattgacat tattttattta 720
ttcattgatg tatttgttat tcgtttgctt gtttttagaa tagtttgagg ccgtcttttt 780
ggattttatt gaactgcttt attgtatacg agtacttcgt gctttgaaac actgctgaaa 840
ataaaacaaa cactgacgta gc 862

<210> 98
<211> 75
<212> PRT
<213> *Conus geographus*

<400> 98
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

<400>	100						
ggccagacga	caacaaagag	tcaaccccac	tgccacgtca	agagcgaagc	gccacagcta		60
agacaagagg	gatcgatagc	agttcatgat	gtctaaactg	ggagtcttgt	tgaccatctg		120
tctgcttctg	tttccoctta	ctgctcttcc	gatggatgga	gatgaacctg	caaaccgacc		180
tgtcgagcgt	atgcaggaca	acatttcata	tgagcagtat	cccttgtttg	agaagagacg		240
agattgttgc	actccgccga	ggaaatgcaa	agaccgacga	tgcaaaccga	tgaaatgttg		300
cgctggacga	taacgtgttg	atgaccaact	ttatcacggc	tagctcagtg	tttagtgaat		360
aagtaaaaatg	attgcagttc	tgctcagatt	gcttttgtgt	tttgggtctaa	gatcaatgac		420
caaaccgttg	ttttgatgcg	gattgtcata	tattttctga	ttccaatcca	acactagatg		480
atttaatcac	gatagattaa	ttttctatca	atgoccttgat	ttttcgtctg	tcatatcagt		540
tttgtttata	tttatTTTTT	cgtcactgtc	tacacaaacg	catgcatgca	cgcacgcacg		600
cacacacgca	cgcacgctcg	cacaaacatg	cgcgcgcacg	cacacacaca	cacacacaca		660
aacacacaca	cgaagcaatc	acacaattag	ttgacattat	ttattttattc	attgatgtat		720
ttgtttattcg	tttgcttggt	tttgaatag	tttgaggcgg	tcttttttggg	tttatttgaa		780
ctgctttatt	gtatacgagt	acttcgtgct	ttgaaacact	gctgaaaata	aaacaaacac		840
tgacgtagca	aaaaaaaaaa						860

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<400>      101  
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe  
1                               5                10              15  
  
Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro  
                                20          25            30  
  
Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe  
                                35          40            45  
  
Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg  
                    50                  55              60  
  
Arg Cys Lys Pro Met Lys Cys Cys Ala Gly Arg  
65                      70              75
```

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<220>
<221>  PEPTIDE
<222>  (1)..(22)
<223>  Xaa at residue 6, 7 and 17 is Pro or Hyp
```

<210>	103
<211>	22
<212>	PRT
<213>	Conus geographus

```
<220>
<221>  PEPTIDE
<222>  (1)..(22)
<223>  Xaa at residue 6, 7 and 17 is Pro or Hyp
```

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<210> 104
<211> 321
<212> DNA
<213> Conus gloriamaris
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<400> 104
ctcactatag gaattcgagc tcggtacacg ggatcgatag cagttcatga tgtctaaact      60
gggagccttg ttgaccatct gtctacttct gttttcccta actgctgttc cgetggatgg      120
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agatcaacat gcagaccaac ctgcagagcg tctgcatgac cgccttccaa ctgaaaatca      180
tcccttatat gatcccgta aacgggtgttg cgatgattcg gaatgcgact attcttgctg      240
gccttgctgt atgtttggat aacctttgtt atcgcggcct cgataagtgt ctaatgaata      300
agtaaaacga ttgcagtagg c                                              321

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```

<210> 105
<211> 71
<212> PRT
<213> Conus gloriamaris

```

```

<400> 105
Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
1          5          10          15
Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
          20          25          30
Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
          35          40          45
Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
          50          55          60
Trp Pro Cys Cys Met Phe Gly
65          70

```

```

<210> 106
<211> 17
<212> PRT
<213> Conus gloriamaris

```

```

<220>
<221> PEPTIDE
<222> (1)..(17)
<223> Xaa at residue is 6 Glu or gamma-carboxy Glu; Xaa at residue 13 i
s Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at resid
ue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr o
r O-phospho-Ty

```

```

<400> 106
Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Met
1          5          10          15

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Phe

```

<210> 107
<211> 257
<212> DNA
<213> Conus gloriamaris

```

```

<400> 107
gttcatgatg tctaaactgg gagtcttgtt gatcatctgt ctacttctgt ttccccttac      60
tgctgttccg ctggatggag atcaacctgc agaccgatat gcagagcgta tgcaggacga      120
catttcatct gaacatcatc ccatgtttga tgccgtcaga ggggtgttgcc atctgttggc      180
atgccgcttc ggatgctcgc cttgttgttg gtgatcagct ttgttatcgc ggcctcatca      240
agtgactcta atgcaaa
<210> 108
<211> 69

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<212> PRT
 <213> Conus gloriamaris

<400> 108
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Tyr
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His His Pro Met Phe
 35 40 45
 Asp Ala Val Arg Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys
 50 55 60
 Ser Pro Cys Cys Trp
 65

<210> 109
 <211> 17
 <212> PRT
 <213> Conus gloriamaris
 <220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 14 is Pro or Hyp; Xaa at residue 17 is Trp or brom
 o-Tr

<400> 109
 Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Xaa Cys Cys
 1 5 10 15

Xaa

<210> 110
 <211> 471
 <212> DNA
 <213> Conus gloriamaris

<400> 110
 gagacgacaa ggaacagtca accccacagc cagccaaga gcagacagcc acagctacgt 60
 gaagaaggggt ggagagaggt tcgtgatgtt gaaaatggga gtggtgctat tcattcttct 120
 ggtactgttt cccctggcaa cgctccagct ggatgcagat caacctgtag aacgatatgc 180
 ggagaacaaa cagctcctca acccagatga aaggaggga atcatattgc atgctctggg 240
 gacgcgatgc tgttcttggg atgtgtgcga ccaccgagt tgtacttgct gcggcggtta 300
 gcgccgaaca tccatggcgc tgtgctgggc ggttttatcc aacaacgaca gcgtttgttg 360
 atttcatgta tcattgcgcc cagctctctt gtctaagaat gacgaacatg attgcactct 420
 ggttcagatt tcgtgttctt ttctgacaat aatgacaaa actccaaaaa a 471

<210> 111
 <211> 71
 <212> PRT
 <213> Conus gloriamaris

<400> 111
 Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe Pro

1 5 10 15
 Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr Ala
 20 25 30
 Glu Asn Lys Gln Leu Leu Asn Pro Asp Glu Arg Arg Glu Ile Ile Leu
 35 40 45
 His Ala Leu Gly Thr Arg Cys Cys Ser Trp Asp Val Cys Asp His Pro
 50 55 60
 Ser Cys Thr Cys Cys Gly Gly
 65 70

<210> 112
 <211> 16
 <212> PRT
 <213> Conus gloriamaris
 <220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 10 is Pro or Hyp; Xaa at residue 4 is Trp or bromo
 -Tr

<400> 112
 Cys Cys Ser Xaa Asp Val Cys Asp His Xaa Ser Cys Thr Cys Cys Gly
 1 5 10 15

<210> 113
 <211> 304
 <212> DNA
 <213> Conus laterculatus

<400> 113
 cgacctcaag aaggatcgat agcagttcat gatgtctaaa ctgggagtct tgttgacat 60
 ctgtctgctt ctgtttcccc ttactgctct tccgatggat ggagatcaac ctgcagaccg 120
 acctgcagag cgtatgcagg acgtttcatc tgaacagcat cocttgatg atcccgtaa 180
 acggtgttgc gactggccat gcagcggatg catccottgt tgctaatagt aacaacgtgt 240
 tgataaccaa ctttcttacc acgactacgt caagtgtcta atgaataagt aaaatgattg 300
 cagt 304

<210> 114
 <211> 65
 <212> PRT
 <213> Conus laterculatus

<400> 114
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Val Ser Ser Glu Gln His Pro Leu Tyr Asp
 35 40 45
 Pro Val Lys Arg Cys Cys Asp Trp Pro Cys Ser Gly Cys Ile Pro Cys
 50 55 60

Cys

<210>	115
<211>	13
<212>	PRT
<213>	Conus laterculatus

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<400> 115
Cys Cys Asp Xaa Xaa Cys Ser Gly Cys Ile Xaa Cys Cys
1          5          10
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<210> 116
<211> 313
<212> DNA
<213> Conus laterculatus
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<400> 116
cgacctcaag aaggatcgat agcagttcat gatgtctaaa ctgggagtct tgttgaccat 60
ctgtctgctt ctgtttcccc ttactgctct ggatggagat caacctgcag accgacttgc 120
agagcgtatg caggacgaca ttcatctga gcagcatccc ttgaaaaaga gacgagactg 180
ttgcacacct ccgaagaaat gcagagaccg acaatgcaaa cctgcacgtt gttgcggagg 240
ataacgtggt gatgaccaac tttgttatca cggctacgtc aagtgtctag tgaataagta 300
aaacgattgc aqt 313

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<210>	117
<211>	71
<212>	PRT
<213>	Conus laterculatus

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<400> 117
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1          5          10          15
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Pro Leu Thr Ala Leu Asp Gly Asp Gln Pro Ala Asp Arg Leu Ala Glu
20 25 30

Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Phe Glu Lys Arg
35 40 45

Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Arg Asp Arg Gln Cys Lys
50 55 60

Pro Ala Arg Cys Cys Gly Gly
65 70

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<210> 118
<211> 22
<212> PRT
<213> Conus laterculatus
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<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 6, 17 and 17 is Pro or Hyp
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<400> 118

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Arg Asp Arg Gln Cys Lys
 1 5 10 15

Xaa Ala Arg Cys Cys Gly
 20

<210> 119

<211> 314

<212> DNA

<213> Conus laterculatus

<400> 119

gggatcgata gcagttcatg atgtctaaac tgggagtctt gttgaccatc tgtctgcttc 60
 tgtttccccc tactgctctt ccgatggatg gagatcaact tgcacgcoga tctgcagagc 120
 gtatgcagga caacatttca tctgagcagc atcacctctt tgaaaagaga cgaccaccat 180
 gttgcaccta tgacgggagt tgccataaaag aatcatgcat gcgtaaagct tgttgccgat 240
 gataacgtgt tgatgaccaa ctttggtatc acggctactc aagtgtctaa tgaataagta 300
 aaatgattgc agta 314

<210> 120

<211> 74

<212> PRT

<213> Conus laterculatus

<400> 120

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Arg Arg Ser
 20 25 30

Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His His Leu Phe
 35 40 45

Glu Lys Arg Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys
 50 55 60

Glu Ser Cys Met Arg Lys Ala Cys Cys Gly
 65 70

<210> 121

<211> 22

<212> PRT

<213> Conus laterculatus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 2 and 3 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-p-sulpho-Ty

<400> 121

Arg Xaa Xaa Cys Cys Thr Xaa Asp Gly Ser Cys Leu Lys Xaa Ser Cys
 1 5 10 15

Met Arg Lys Ala Cys Cys
 20

<210> 122
 <211> 314
 <212> DNA
 <213> Conus laterculatus

<400> 122
 gggatcgata gcagttcatg atgtctaaac tgggagtctt gttgaccacc tgtctgcttc 60
 tgtttccctt tactgtcttt ccgatggatg gagatcaact tgcacgccga cctgcagagc 120
 gtatgcagga caacatttca tctgagcagc atcccttctt tgaaaggaga cgaccaccat 180
 gttgcaccta tgacgggagt tgcctaaaag aatcatgcaa gcgtaaagct tgttgccgat 240
 aataacgtgt tgatgaccaa ctttgttatc acggctactc aagtgtctaa tgaataagta 300
 aaatgattgc agta 314

<210> 123
 <211> 74
 <212> PRT
 <213> Conus laterculatus

<400> 123
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Thr Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Arg Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45
 Glu Arg Arg Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys
 50 55 60
 Glu Ser Cys Lys Arg Lys Ala Cys Cys Gly
 65 70

<210> 124
 <211> 22
 <212> PRT
 <213> Conus laterculatus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 2 and 3 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 124
 Arg Xaa Xaa Cys Cys Thr Xaa Asp Gly Ser Cys Leu Lys Xaa Ser Cys
 1 5 10 15
 Lys Arg Lys Ala Cys Cys
 20

<210> 125
 <211> 247
 <212> DNA
 <213> Conus leopardus

<400> 125

<210> 129

<211> 71
 <212> PRT
 <213> *Conus lividus*

<400> 129
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Leu Arg Leu Val Arg Asp Gln Pro Ala Glu
 20 25 30
 Arg Pro Ala Lys Arg Thr Gln Asp Asp Ile Pro Asn Gly Gln Asp Pro
 35 40 45
 Leu Ile Asp Arg Gln Ile Asn Cys Cys Pro Trp Pro Cys Pro Asp Ser
 50 55 60
 Cys His Tyr Gln Cys Cys His
 65 70

<210> 130
 <211> 19
 <212> PRT
 <213> *Conus lividus*

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6, 8 and 10 is Pro or Hyp; Xaa at residue 7 is Trp or bromo-Trp; Xaa at residue 15 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 130
 Xaa Ile Asn Cys Cys Xaa Xaa Xaa Cys Xaa Asp Ser Cys His Xaa Gln
 1 5 10 15

Cys Cys His

<210> 131
 <211> 275
 <212> DNA
 <213> *Conus lynceus*

<400> 131
 aaggatcgat agcagttcat gatgtctaaa ctgggagtct tgttgaccat ctgtctgctt 60
 ctgtttcccc ttactgctct tccgatggat ggagatcaat ctgcagaccg acttgacagag 120
 cgtatgcagg acaacatttc atctgagcag catcccttct ttgaaaagag aggacgagac 180
 tgttgcacac ctccgaggaa atgcagagac cgagcctgca aacctcaacg ttgttgcgga 240
 ggataagctg ttgatgacca actttgttat acggc 275

<210> 132
 <211> 75
 <212> PRT
 <213> *Conus lynceus*

<400> 132
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Ala Asp Arg Leu

20 25 30

Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
35 40 45

Glu Lys Arg Gly Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Arg Asp
50 55 60

Arg Ala Cys Lys Pro Gln Arg Cys Cys Gly Gly
65 70 75

<210> 133
<211> 23
<212> PRT
<213> Conus lynceus

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 7, 8 and 18 is Pro or Hyp

<400> 133
Gly Arg Asp Cys Cys Thr Xaa Xaa Arg Lys Cys Arg Asp Arg Ala Cys
1 5 10 15

Lys Xaa Gln Arg Cys Cys Gly
20

<210> 134
<211> 803
<212> DNA
<213> Conus magus

<400> 134
caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
gcttctgttt ccccttactg ctcttcgat ggatggagat gaacctgcaa accgacctgt 120
cgagcgtatg caggacaaca tttcatctga gcagtatccc ttgtttgaga agagacgaga 180
ttgttgcaact ccgccgaaga aatgcaaaga ccgacaatgc aaaccccgaga gatgttgccg 240
tggaacgataa cgtgttgatg accaacttta tcacggctac gtcaagtgtt tagtgaataa 300
gtaaaatgat tgcagtcttg ctacagatttg cttttgtgtt ttggtctaaa gatcaatgac 360
caaaccgttg ttttgatgcg gattgtcata ttttctcga ttccaatcca aactagatg 420
atttaatcac gatagattaa ttttctatca atgccttgat ttttctctg tcatatcagt 480
tttgtttata tttatTTTTT cgtcactgtc tacacaaacg catgcatgca cgcatgcacg 540
cacacacgca cgcaogctcg cacaacatg cgcgcgcacg cacacacaca cacacacaca 600
caaacacaca cacgaagcaa tcacacaatt agttgacatt atttatttat tcattgatgt 660
atttgttatt cgtttgcttg tttttagaat agtttgaggc tgtctttttg gatttatttg 720
aactgcttta ttgtatacga gtacttcgtg cggggaaaca ctgctgaaaa taaaacaaac 780
actgacgtag caaaaaaaaa aaa 803

<210> 135
<211> 75
<212> PRT

<213> Conus magus

<400> 135

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro
20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg
50 55 60

Gln Cys Lys Pro Gln Arg Cys Cys Ala Gly Arg
65 70 75

<210> 136

<211> 22

<212> PRT

<213> Conus magus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 6 and 7 is Pro or Hyp

<400> 136

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys
1 5 10 15

Xaa Gln Arg Cys Cys Ala
20

<210> 137

<211> 656

<212> DNA

<213> Conus magus

<400> 137

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60

gcttctgttt ccccttactg ctcttccaat ggatggagat caacctgcag accaacctgc 120

agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata tgagaaaaag 180

gtgttgccgc cccggcgggt catgccccgt atatttcaga gacaatttta tttgtggttg 240

ttgttaaagt acaacgtgtc gatgaccaac ttcattatca cgactacgcc aagtgtctaa 300

tgaataaata aaatgattgc agtctcgctc agatttgctt ttgtattttg gtctaaagat 360

caatgaccaa accgttggtt tgggtgtgat tttcatatat ttctcgagtc ctatccaaca 420

ctagatgatt taatcacgat agatctgatt tttttatcaa aggcttggtt tttcgtctgt 480

cacatcagtt ttgtttatat ttaatttttc gtcactgatt acacacacgc atgaacgcac 540

agagtactaa cacatacaca cacacacaca cacacacaca cacacacaca cacacacaca 600

cacacacaca cgcgcgcgcg cgcggcgcca tctagtagcg ccgcgacgac acacac 656

<210> 138

<211> 74

<212> PRT

<213> Conus magus

<400> 138

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Met Arg Lys Arg Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
50 55 60

Phe Arg Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 139

<211> 21

<212> PRT

<213> Conus magus

<220>

<221> PEPTIDE

<222> (1)..(21)

<223> Xaa at residue 4 and 9 is Pro or Hyp; Xaa at residue is 11 Tyr, 1
25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 139

Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp Asn Phe
1 5 10 15

Ile Cys Gly Cys Cys
20

<210> 140

<211> 594

<212> DNA

<213> Conus magus

<400> 140

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgttt	60
gcttctgttt ccccttactg ctcttccgag ggatggagat caatctgtag accgacctgc	120
agagcgtatg caggacgaca tttcatctga gctgcatccc ttgtcaatca gaaaaagaat	180
gtgttgcggc gagagtgcgc catgccccag ctatttcaga aacagtcaga tttgtcattg	240
ttgttaaagt acaacgtgtc gatgaccacc ttcgttatca cgactaatga taagtaaaat	300
gattgcagtc tgcctcagat ttgcttttgt attttggtct aaagatcaat gaccaaaccg	360
ttgttttgat gtggattttc atatatttct cgagtcctat ccaacactag atgatttaat	420
cacgatagat ctgatttttt tatcaaagcc ttggtttttc gtctgtcaca tcagttttgt	480
ttatatattaa tttttcgtca ctgattacac acacgcatga acgcacagac gtactaacac	540
atacacacac acacacacac acacacacac acacacacac acacacacac acac	594

<210> 141

<211> 74

<213> Conus magus

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Arg Asp Gly Asp Gln Ser Val Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Leu His Pro Leu Ser
35 40 45

Ile Arg Lys Arg Met Cys Cys Gly Glu Ser Ala Pro Cys Pro Ser Tyr
50 55 60

Phe Arg Asn Ser Gln Ile Cys His Cys Cys
65 70

<211> 22

<213> Conus magus

 $\langle 220 \rangle$

<221> PEPTIDE

<222> (1) .. (22)

<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 142

Met Cys Cys Gly Xaa Ser Ala Xaa Cys Xaa Ser Xaa Phe Arg Asn Ser
1 5 10 15

Gln Ile Cys His Cys Cys
20

<210> 143

<211> 501

<212> DNA

<213> Conus magus

<400> 143

caagagggat cgaatgcagt tcatgatgtc taaactggga gtcttgttga ccattctgtct 60

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agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata agagacaaaa 180

gtgttgccgc cccggcggtt catgccccgt atatttcaca gacaatttta tttgtggttg 240

ttgttaaattg acaacgtgtc gatgaccaac ttcattatca cgactacgcc aagtgtctaa 300

tgaataaata aaatgattgc agtctcgctc agatttgctt ttgtatttgg tctaaagatc 360

aatgaccaaa ccgttgtttt ggtgctggat ttctatatat ttctcgattc ctatccaaca 420

ctagatgatt taatcacgat agatctgatt tttttatcaa tgccttaatt ttttgctctg 480

tcatatcagt tttgtttata t

<210> 144

<211> 74

<212> PRT

<400> 144

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Lys Arg Gln Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
50 55 60

Phe Thr Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 145

<211> 23

<212> PRT

<213> Conus magus

 $\langle 220 \rangle$

<221> PEPTIDE

<222> (1) .. (23)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 145

Xaa Lys Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Thr Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 146

<211> 454

<212> DNA

<213> Conus magus

<400> 146

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60

gcttctgttt ccccttactg ctcttccaat gqatggagat caacctgcag accaacctgc 120

agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata agagacaaaa 180

gtgttgccgc cccggcggtt catgccccgt atatctcaga gacaatttta tttgtggttg 240

ttgttaaattg acaacgtgtc gatgaccatc ttcattatca cgactacgcc aagtgtctaa 300

tgaataaata aaatgattgc agtctcgcctc agatttgctt ttgtattttg gtctaaagat 360

caatgaccaa accgttgttt tgggtgtggat tttcatatat ttctcgattc ctatccaaca 420

ctagatgatt taatcacgat agatctgatt tttt

<210> 147

<211> 74

<212> PRT

<213> Conus magus

<400> 147

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Lys Arg Gln Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
50 55 60

Phe Arg Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 148

<211> 23

<212> PRT

<213> Conus magus

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 148

Xaa Lys Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 149

<211> 22

<212> PRT

<213> Conus magus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 10 and 20 is
Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 149

Xaa Lys Cys Cys Ser Gly Gly Ser Cys Xaa Leu Xaa Phe Arg Asp Arg
1 5 10 15

Leu Ile Cys Xaa Cys Cys
20

<210> 150

<211> 19

<212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> Xaa at residue 16 is Pro or Hyp

<400> 150

Ser Lys Gln Cys Cys His Leu Ala Ala Cys Arg Phe Gly Cys Thr Xaa
1 5 10 15

<210>	151	
<211>	321	
<212>	DNA	
<213>	Conus marmoreus	
<400>	151	
caagaaggat	cgatagcagt	tcatgatgtc
taaactggga	gtcttggtga	ccatctgtct
		60
gcttctgttt	cccgttactg	ctcttccgat
ggatggtgat	caacctgcag	accgacttgt
		120
agagcgtatg	caggacaaca	tttcatctga
gcagcatccc	ttctttgaaa	agagaagagg
		180
aggctgttgc	acacctccga	ggaaatgcaa
agaccgagcc	tgcaaacctg	cacgttgctg
		240
cggcccagga	taacgtgttg	atgaccaact
ttgttatcac	ggctacgtca	agtgtctagt
		300
gaataagtaa	aacgattgca	g
		321

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<210>      152
<211>      76
<212>      PRT
<213>      Conus marmoreus

<400>      152
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1              5              10              15

Pro Val Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
              20              25              30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
              35              40              45

Glu Lys Arg Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp
              50              55              60

Arg Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
65              70              75

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<210> 153
<211> 24
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(24)
<223> Xaa at residue 3, 8, 18 and 24 is Pro or Hyp
```

```

<400> 153
Arg Gly Gly Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys
1          5          10          15

Lys Xaa Ala Arg Cys Cys Gly Xaa
                20

```

```
<210> 154
<211> 296
<212> DNA
<213> Conus marmoreus

<400> 154
gagctcggta ccccgacctc aagagggatc gatagcagtt catgatgtct aaactgggaa 60
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<210> 155
<211> 68
<212> PRT
<213> Conus marmoreus
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Met Met Ser Lys Leu Gly Ile Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His His Pro Phe Phe
35 40 45

Asp Pro Val Lys Arg Cys Cys Arg Leu Ser Cys Gly Leu Gly Cys His
50 55 60

Pro Cys Cys Gly
65

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<210> 156
<211> 14
<212> PRT
<213> Conus marmoreus
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```
<220>
<221>  PEPTIDE
<222>  (1)..(14)
<223>  Xaa at residue 12 is Pro or Hyp
```

Cys Cys Arg Leu Ser Cys Gly Leu Gly Cys His Xaa Cys Cys
1 5 10

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<210> 157
<211> 355
<212> DNA
<213> Conus marmoreus
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ggcctacacc	aagcttgcac	gcctgcaggt	cgactctaga	ggatccccga	tcgatagcag	60
ttcatgatgt	ctagactggg	agtcttggtg	accatctgtc	tacttctgtt	cccccttact	120
gctgttccgc	tggatggaga	tcaacctgcg	gaccgacctg	cagagcgccct	gcaggacgac	180
atttcacctg	aacatcaccc	ccattttgat	tccgcgagag	agtgttgogg	ttcggttcgca	240
tgccgctttg	gatgcgtgcc	ttgttggtga	tgaccagctt	tgttatcaag	gcctcatcga	300
gtgtctaattg	aataagtaaa	acgattgcag	taggcgggta	ccgaqctoga	attcc	355

<210>	158
<211>	69
<212>	PRT

<213> Conus marmoreus

<400> 158

Met Met Ser Arg Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Leu Gln Asp Asp Ile Ser Ser Glu His His Pro His Phe
35 40 45

Asp Ser Gly Arg Glu Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys
50 55 60

Val Pro Cys Cys Val
65

<210> 159

<211> 17

<212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(17)

<223> Xaa at residue 1 is Glu or gamma-carboxy Glu; Xaa at residue 14 is Pro or Hy

<400> 159

Xaa Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys
1 5 10 15

Val

<210> 160

<211> 295

<212> DNA

<213> Conus marmoreus

<400> 160

cgacctcaag agggatcgat agcagttcat gatgtctaaa ctgggagtct tgttgaccat 60

ctgtctactt ctatttcccc ttactgctgt tccgctggat ggagaccaac ctgcagaccg 120

acctgcagag cgtatgcagg acgacatttc atctgaacgt catccttttt ttgatcgag 180

caaacagtgt tgccatctgc cggcatgccg cttcggatgt acgccttggt gttggtgatc 240

agctttgtta tcgcgtcttc atcaagtgtc taatgaataa gtaaaatgat tgcag 295

<210> 161

<211> 67

<212> PRT

<213> Conus marmoreus

<400> 161

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser His Pro Phe Phe Asp Arg
35 40 45

Ser Lys Gln Cys Cys His Leu Pro Ala Cys Arg Phe Gly Cys Thr Pro
 50 55 60

Cys Cys Trp
 65

<210> 162
 <211> 19
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 8 and 16 is Pro or Hyp; Xaa at residue 19 is Trp o
 r bromo-Tr

<400> 162
 Ser Lys Gln Cys Cys His Leu Xaa Ala Cys Arg Phe Gly Cys Thr Xaa
 1 5 10 15

Cys Cys Xaa

<210> 163
 <211> 235
 <212> DNA
 <213> Conus marmoreus

<400> 163
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
 actgctcttc cgctggatgg agatcaacct gcagaccaac gtgcagagcg tacgcaggcc 120
 gagaagcatt ccttgccctga tccgagaatg ggctgttgcc cgtttccatg caaaaccagt 180
 tgcactactt tgtgttgogg gtgatgataa cgtgttgatg accaactttc togag 235

<210> 164
 <211> 67
 <212> PRT
 <213> Conus marmoreus

<400> 164
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Arg Ala Glu Arg Thr Gln Ala Glu Lys His Ser Leu Pro Asp Pro
 35 40 45

Arg Met Gly Cys Cys Pro Phe Pro Cys Lys Thr Ser Cys Thr Thr Leu
 50 55 60

Cys Cys Gly
 65

<210> 165
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<220>

<221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 5 and 7 is Pro or Hyp

<400> 165
 Met Gly Cys Cys Xaa Phe Xaa Cys Lys Thr Ser Cys Thr Thr Leu Cys
 1 5 10 15

Cys

<210> 166
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 6 is Trp or bromo-Trp

<400> 166
 Cys Cys His Xaa Asn Xaa Cys Asp His Leu Cys Ser Cys Cys Gly Ser
 1 5 10 15

<210> 167
 <211> 357
 <212> DNA
 <213> Conus marmoreus

<400> 167
 gccaa gcttg catg cctgca ggatg actct agaggatccc cacctcaaga gggatcgata 60
 gcagttcatg atgtctaaac tgggagtctt gttgaccatc tgtctacttc tgtttgccct 120
 tactgctgtt ccgctggatg gagatcaacc tgcagaccga cctgcagaac gtatgcagga 180
 cgacatttca tctgaacgtc atcccatgtt tgatgccgtc agagattgtt gcccgttgcc 240
 ggcatgcccc tttggatgca acccttggtt tggatgacca gctttgttat cgggacctca 300
 tcaagtgtct aatgaataag taaaaaacga ttcgagtggg taccgagctc gaattcc 357

<210> 168
 <211> 67
 <212> PRT
 <213> Conus marmoreus

<400> 168
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ala Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser His Pro Met Phe Asp Ala
 35 40 45

Val Arg Asp Cys Cys Pro Leu Pro Ala Cys Pro Phe Gly Cys Asn Pro
 50 55 60

Cys Cys Gly
 65

<210> 169
 <211> 16

<212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4, 6, 9 and 14 is Pro or Hyp

<400> 169
 Asp Cys Cys Xaa Leu Xaa Ala Cys Xaa Phe Gly Cys Asn Xaa Cys Cys
 1 5 10 15

<210> 170
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 170
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 171
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 171
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 172
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 172
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 173
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 14 is Pro or Hyp

<400> 173

Gly Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys
 1 5 10 15

Val

<210> 174
 <211> 244
 <212> DNA
 <213> Conus nobilis

<400> 174
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttcccctt 60
 actgctcttc cgctggatga agatcaaccg gtacaccgac ctgcagagcg tatgcaggac 120
 atttcatctg atcaacatct cttctttgat ctcacaaac ggtgctgcga gttgccatgc 180
 gggccagget tttgcgtccc ttgttgctga catcaataac gtgttgatga ccaactttct 240
 cgag 244

<210> 175
 <211> 69
 <212> PRT
 <213> Conus nobilis

<400> 175
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Val His
 20 25 30
 Arg Pro Ala Glu Arg Met Gln Asp Ile Ser Ser Asp Gln His Leu Phe
 35 40 45
 Phe Asp Leu Ile Lys Arg Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe
 50 55 60

Cys Val Pro Cys Cys
 65

<210> 176
 <211> 15
 <212> PRT
 <213> Conus nobilis

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 8
 adn 13 is Pro or Hy

<400> 176
 Cys Cys Xaa Leu Xaa Cys Gly Xaa Gly Phe Cys Val Xaa Cys Cys
 1 5 10 15

<210> 177
 <211> 262
 <212> DNA
 <213> Conus nobilis

<400> 177
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttcccctt 60

actgcttttc cgatggatgg agatcaacct gcagaccaac ctgcagatcg tatgcaggac 120
gacatttcac ctgagcagta tcccttggtt gataagagac aaaagtgttg cactgggaag 180
aaggggtcat gctccggcaa agcatgcaaa aatctcaaat gttgctctgg acgataacgt 240
gttgatgacc aactttctcg ag 262

<210> 178
<211> 78
<212> PRT
<213> Conus nobilis

<400> 178
Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15
Leu Phe Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp
20 25 30
Gln Pro Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro
35 40 45
Leu Phe Asp Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys
50 55 60
Ser Gly Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
65 70 75

<210> 179
<211> 23
<212> PRT
<213> Conus nobilis

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 1 is Gln or pyro-Glu

<400> 179
Xaa Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15
Lys Asn Leu Lys Cys Cys Ser
20

<210> 180
<211> 238
<212> DNA
<213> Conus pulicarius

<400> 180
ggatccatga tgtctaaact gggagttttg ttgaccatct gtctgcttct gtttcccctt 60
actgctgttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg tatgcaggac 120
attgcaactg aacagcatcc cttctttgat cccgtcaaac ggtgttgcaa cagctgttac 180
atgggatgca tcccttggtg cttctagtaa taacgtgttg atgaccaact ttctcgag 238

<210> 181
<211> 68
<212> PRT
<213> Conus pulicarius

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Phe
35 40 45

Phe Asp Pro Val Lys Arg Cys Cys Asn Ser Cys Tyr Met Gly Cys Ile
50 55 60

Pro Cys Cys Phe
65

<210> 182

$\langle 211 \rangle$	14
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<212> PRT

<213> Conus pulicarius

 $\langle 220 \rangle$

<221> PEPTIDE

<222> (1) .. (14)

<223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 5 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 182

Cys Cys Asn Ser Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
1 5 10

<210> 183

<211> 238

<212> DNA

<213> Conus quercinus

<400> 183

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60

acagctcttc agctggatgg agatcaacct gcagaccgac ctgcagagcg tacgcaggac 120

attgcacatctg aacagtatctg aaagtgttgat caqagacaga ggtgttgcca gtggccatgc 180

cccggtagtt gcagatgctg ccgtactggt taacgtgttg atgaccaact ttctcgaq 238

<210> 184

<211> 70

<212> PRT

<213> Conus quercinus

<400> 184

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Gln Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

Arg Pro Ala Glu Arg Thr Gln Asp Ile Ala Ser Glu Gln Tyr Arg Lys
35 40 45

Phe Asp Gln Arg Gln Arg Cys Cys Gln Trp Pro Cys Pro Gly Ser Cys
50 55 60

Arg Cys Cys Arg Thr Gly
65 70

<210> 185
 <211> 17
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 7 and 9 is Pro or Hyp; Xaa at residue 6 is Trp or bromo-Trp

<400> 185
 Xaa Arg Cys Cys Gln Xaa Xaa Cys Xaa Gly Ser Cys Arg Cys Cys Arg
 1 5 10 15

Thr

<210> 186
 <211> 15
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 11 and 14 is Pro or Hyp

<400> 186
 Cys Cys Ser Gln Asp Cys Leu Val Cys Ile Xaa Cys Cys Xaa Asn
 1 5 10 15

<210> 187
 <211> 15
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 11 14 is Pro or Hyp; Xaa at residue 7 is Trp or bromo-Trp

<400> 187
 Cys Cys Ser Arg His Cys Xaa Val Cys Ile Xaa Cys Cys Xaa Asn
 1 5 10 15

<210> 188
 <211> 323
 <212> DNA
 <213> Conus radiatus

<400> 188
 tcaagaagga tcgatagcag ttcatgatgt cttaaactggg agtcttggtg accatctgtc 60
 tgcttctgtt tcccccttact gctotctcga tggatggaga tcaacctgta gaccgacttg 120
 cagagcgtat gcaggacaac atttcatctg agcag acac cttctttgaa aagagactac 180
 catcgtgttg ctcccttaac ttgcggcttt gccagtagc agcatgcaaa cgtaaccctt 240
 gttgcacagg ataacgtgtt gatgaccaac ttgtttatca cggctacgtc aagtgtctag 300
 tgaataagta aaacgattgc agt 323

<210> 189
 <211> 76
 <212> PRT
 <213> Conus radiatus

<400> 189
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Val Asp Arg Leu
 20 25 30
 Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Thr Phe Phe
 35 40 45
 Glu Lys Arg Leu Pro Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Pro
 50 55 60
 Val Pro Ala Cys Lys Arg Asn Pro Cys Cys Thr Gly
 65 70 75

<210> 190
 <211> 24
 <212> PRT
 <213> Conus radiatus

<220>
 <221> PEPTIDE
 <222> (1)..(24)
 <223> Xaa at residue 2, 13, 15 and 21 is Pro or Hyp

<400> 190
 Leu Xaa Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Xaa Val Xaa Ala
 1 5 10 15
 Cys Lys Arg Asn Xaa Cys Cys Thr
 20

<210> 191
 <211> 336
 <212> DNA
 <213> Conus radiatus

<400> 191
 aggtcgactc tagaggatcc ccaaggatcg atagcagttc atgatgtcta aactgggagt 60
 cttgttgacc atctgtctgc ttctgtttcc cttactgct cttccgatgg atggagatca 120
 acctgcagac cgacttgacag agcgtatgca ggacgacatt tcatctgagc agcatccctt 180
 ctttaaaaag agacaacaaa gatgttgcac cgtaagagg atttgtccag taccagcatg 240
 cagaagtaaa ccttgttgca aatcataacg tattgatgac caactttggt atcacggcta 300
 cgtcaagtgt ctagtgaata agtaaaatga ttgcag 336

<210> 192
 <211> 75
 <212> PRT
 <213> Conus radiatus

<400> 192
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Phe Phe
35 40 45

Lys Lys Arg Gln Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Pro Val
50 55 60

Pro Ala Cys Arg Ser Lys Pro Cys Cys Lys Ser
65 70 75

<210> 193

<211> 24

<212> PRT

<213> Conus radiatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12, 14 and 20
is Pro or Hy

<400> 193

Xaa Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Xaa Val Xaa Ala Cys
1 5 10 15

Arg Ser Lys Xaa Cys Cys Lys Ser
20

<210> 194

<211> 326

<212> DNA

<213> Conus radiatus

<400> 194

acctcaagaa ggatcgatag cagttcatga tgtctaaact gggagtcttg ttgaccatct 60

gtctgcttct gtttcccggt actgctcttc cgatggatgg tgatcaacct gcagaccgac 120

ttgtagagcg tatgcaggac aacatttcat ctgagcagca tcccttcttt gaaaagagaa 180

gaggaggctg ttgcacacct ccgaggaaat gcaaagaccg agcctgcaaa cctgcacgtt 240

gctgcgggccc aggataacgt gttgatgacc aactttgtta tcacggctac gtcaagtgtc 300

tagtgaataa gtaaaacgat tgcagt 326

<210> 195

<211> 76

<212> PRT

<213> Conus radiatus

<400> 195

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Val Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
35 40 45

Glu Lys Arg Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp
50 55 60


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<210> 196
<211> 24
<212> PRT
<213> Conus radiatus
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<220>
<221> PEPTIDE
<222> (1)..(24)
<223> Xaa at residue 7, 8, 18 and 24 is Pro or Hyp
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<400> 196
Arg Gly Gly Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys
1          5          10          15
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Lys Xaa Ala Arg Cys Cys Gly Xaa
20

<210> 197
<211> 238
<212> DNA
<213> *Conus rattus*

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<400> 197
ggatccatga tgtctaaact gggagtccttg gtgaccatct gcttgcttct gttccctctt 60
gctgcttttc cactggatgg agatcaacct gcagaccacc ctgcaaagcg tacgcaagat 120
gacagttcag ctgccctgat caatgcctgg cttgatgaat cccagacttg ctgcagtaac 180
tgcggtgaag attgtgatgg ttggtgccag taacgtggtt atgaccaact ttctcgag 238
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<210> 198
<211> 70
<212> PRT
<213> Conus rattus
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<400> 198
Gly Ser Met Met Ser Lys Leu Gly Val Leu Val Thr Ile Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Ala Ala Phe Pro Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

His Pro Ala Lys Arg Thr Gln Asp Asp Ser Ser Ala Ala Leu Ile Asn
35 40 45

Ala Trp Leu Asp Glu Ser Gln Thr Cys Cys Ser Asn Cys Gly Glu Asp
50 55 60

Cys Asp Gly Cys Cys Gln
65 70

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<210> 199
<211> 16
<212> PRT
<213> Conus rattus
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<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 9 is Glu or gamma-carboxy Gl

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<400> 199

Xaa Thr Cys Cys Ser Asn Cys Gly Xaa Asp Cys Asp Gly Cys Cys Gln
1 5 10 15

<210> 200

<211> 327

<212> DNA

<213> Conus stercusmuscarum

<400> 200

gacctcaaga gggatcgata gcagttcgtg atgtctaaac tgggagtctt gttgaccatc 60

tgtctgcttc tgtttcctct tactgctctt ccgatggatg gagatcaacc tgcagaccaa 120

cctgcagatc gtatgcagga cgacatttca tctgagcagt atcccttggt tgataagaga 180

caaaagtgtt gcaactggga gaaggggtca tgctccggca aagcatgcaa aaatctcaaa 240

tgttgctctg gacgataacg tgttgatgac caactttggt atcacggcta cgtcaagtgt 300

ctaatagaata agtaaaacga ttgcagt 327

<210> 201

<211> 75

<212> PRT

<213> Conus stercusmuscarum

<400> 201

Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
1 5 10 15

Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro Ala
20 25 30

Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe Asp
35 40 45

Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys
50 55 60

Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
65 70 75

<210> 202

<211> 23

<212> PRT

<213> Conus stercusmuscarum

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 1 is Gln or pyro-Glu

<400> 202

Xaa Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
20

<210> 203

<211> 316

<212> DNA

<213> Conus stercusmuscarum

<400> 203
 gatcgatagc agttcgtgat gtctaaactg ggagtccttgt tgaccatctg tctgcttctg 60
 tttccccccta ctgctcttcc gatggatgga gatcaacctg cagaccaacc tgcagatcgt 120
 atgcagaacg acatttcacg tgagcagtat cccttggttg ataagagaca aaagtgttgc 180
 ggccccggcg cgtcatgccc cagatatttc aaagacaatt ttatttgtgg ttgttgtaa 240
 atgacaacgt gtcgatgacc aacttcgta tcacgacttc gccaaagtgtc taatgaataa 300
 gtaaaacgat tgcagt 316
 <210> 204
 <211> 73
 <212> PRT
 <213> Conus stercusmuscarum

<400> 204
 Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
 1 5 10 15
 Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro Ala
 20 25 30
 Asp Arg Met Gln Asn Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe Asp
 35 40 45
 Lys Arg Gln Lys Cys Cys Gly Pro Gly Ala Ser Cys Pro Arg Tyr Phe
 50 55 60
 Lys Asp Asn Phe Ile Cys Gly Cys Cys
 65 70

<210> 205
 <211> 23
 <212> PRT
 <213> Conus stercusmuscarum

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
 ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
 iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 205
 Xaa Lys Cys Cys Gly Xaa Gly Ala Ser Cys Xaa Arg Xaa Phe Lys Asp
 1 5 10 15
 Asn Phe Ile Cys Gly Cys Cys
 20

<210> 206
 <211> 331
 <212> DNA
 <213> Conus striatus

<400> 206
 cgacctttca agagggatcg atagcagttc gcgatgtcta aactgggggt attgttgacc 60
 atctgtctgc ttctgtttcc ccttactgct cttccgatgg atgaagatca acctgcagac 120
 caacttgaag atcgtatgca ggacgacatt tcacttgagc agtatccctc gtttgtagg 180
 agacaaaagt gttgcggcga aggctcgtca tgcccaaat atttcaaaaa caattttatt 240

tgtggttggtt gttaaatgac aacgtgtcga tgaccaactt cgttatcacg actacgccaa 300
gtgtcttgtc taatgataat aaaatgattc c 331

<210> 207
<211> 73
<212> PRT
<213> Conus striatus

<400> 207
Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
1 5 10 15
Leu Thr Ala Leu Pro Met Asp Glu Asp Gln Pro Ala Asp Gln Leu Glu
20 25 30
Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Ser Phe Val
35 40 45
Arg Arg Gln Lys Cys Cys Gly Glu Gly Ser Ser Cys Pro Lys Tyr Phe
50 55 60
Lys Asn Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 208
<211> 23
<212> PRT
<213> Conus striatus

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 208
Xaa Lys Cys Cys Gly Xaa Gly Ser Ser Cys Xaa Lys Xaa Phe Lys Asn
1 5 10 15
Asn Phe Ile Cys Gly Cys Cys
20

<210> 209
<211> 256
<212> DNA
<213> Conus striatus

<400> 209
ggatccatga tgtctaaact gggagtcttg ttgaccgtct gtctgcttct gtttcccctt 60
actgctcttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg tatgcaggac 120
gacatttcat ctgacgagca tcccttgttt gataagagac aaaactgttg caatggggga 180
tgctccagca aatggtgcag agatcacgca cgttgttgcg gtcgatgata acgtgttgat 240
gaccaacttt ctcgag 256

<210> 210
<211> 75
<212> PRT

<213> Conus striatus

<400> 210

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Asp Glu His Pro
35 40 45

Leu Phe Asp Lys Arg Gln Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys
50 55 60

Trp Cys Arg Asp His Ala Arg Cys Cys Gly Arg
65 70 75

<210> 211

<211> 20

<212> PRT

<213> Conus striatus

<220>

<221> PEPTIDE

<222> (1)..(20)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 is Trp or
bromo-Tr

<400> 211

Xaa Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys Xaa Cys Arg Asp His
1 5 10 15

Ala Arg Cys Cys
20

<210> 212

<211> 235

<212> DNA

<213> Conus tessulatus

<400> 212

ggatccatga tgtctaaact gggagtcttg ttgaccatgt gtctgcttct gtttcccctt 60

actgctgttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg taggcaggac 120

attgcaactg acgatcatcc tttgtttgat cccgtcaaac ggtgctgcca caaatgctat 180

atgggatgca tcccttggtg catttagtaa cgtgttgatg accaactttc tcgag 235

<210> 213

<211> 68

<212> PRT

<213> Conus tessulatus

<400> 213

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Met Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

Arg Pro Ala Glu Arg Arg Gln Asp Ile Ala Thr Asp Asp His Pro Leu
35 40 45

Phe Asp Pro Val Lys Arg Cys Cys His Lys Cys Tyr Met Gly Cys Ile
 50 55 60

Pro Cys Cys Ile
 65

<210> 214
 <211> 14
 <212> PRT
 <213> Conus tessulatus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 214
 Cys Cys His Lys Cys Xaa Met Gly Cys Ile Xaa Cys Cys Ile
 1 5 10

<210> 215
 <211> 238
 <212> DNA
 <213> Conus tessulatus

<400> 215
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtgtgcttct gtttcccctt 60
 actgctgttc cgctggatgg agatcaacct gcagaccaac ctgcagagcg tacgcagaac 120
 gagcagcatc ccttgatatga tcagaaaaga aagtgttgcc ggccgccatg cgccatgagc 180
 tgcggcatgg ctaggtgttg ctattaatga taacgtgttg atgaccaact ttctogag 238

<210> 216
 <211> 68
 <212> PRT
 <213> Conus tessulatus

<400> 216
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Val Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Pro Ala Glu Arg Thr Gln Asn Glu Gln His Pro Leu Tyr Asp Gln
 35 40 45

Lys Arg Lys Cys Cys Arg Pro Pro Cys Ala Met Ser Cys Gly Met Ala
 50 55 60

Arg Cys Cys Tyr
 65

<210> 217
 <211> 18
 <212> PRT
 <213> Conus tessulatus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 5 and 6 is Pro or Hyp; Xaa at residue 18 is Tyr, 1

25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 217

Lys Cys Cys Arg Xaa Xaa Cys Ala Met Ser Cys Gly Met Ala Arg Cys
1 5 10 15

Cys Xaa

<210> 218

<211> 564

<212> DNA

<213> Conus textile

<400> 218

gagtcaaccc actgtcacgc caagagcgga cgccacagct aaggcaagaa ggatcgatag 60
cagttcatga tgtctaaact gggagccttg ttgaccatct gtctacttct gttttccctt 120
actgctgttc cgctggatgg agatcaacat gcagaccaac ctgcacagcg tctgcaggac 180
cgcattccaa ctgaagatca tcccttattt gatcccaaca aacgggtgttg cccgccggtg 240
gcatgcaaca tgggatgcaa gccttggtgt ggatgaccag ctttgttatc gcggtctcat 300
gaagtgtcta atgaataagt aaaacgattg cagtttcggt cagatttgct gttgtatattt 360
ggctctaaaga ttaatgacca aactgttctt ttgatccgga ttttcacgta tttctcgatt 420
cctattcaac actagataag ttaatcacga cagatctgat tttccatcaa tgccttgctt 480
tttggctgtg catataaatc ttgtttatat ttaattttct gtcactttca acacgcacac 540
acacacacac acacacgcgc gcgc 564

<210> 219

<211> 69

<212> PRT

<213> Conus textile

<400> 219

Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Gln Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
35 40 45

Asp Pro Asn Lys Arg Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys
50 55 60

Lys Pro Cys Cys Gly
65

<210> 220

<211> 16

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 3, 4 and 13 is Pro or Hyp

<400> 220
 Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Lys Xaa Cys Cys Gly
 1 5 10 15

<210> 221
 <211> 780
 <212> DNA
 <213> Conus textile

<400> 221
 ggatccagac gacaaagaag agtcaaccca ctgccacgtc aagagcagag cccacagcta 60
 agacaagaag gatcgatagc agttcatgat gtttaaactg ggagtcttgt tgaccatctg 120
 tctccttctg ttttccotta atgctgttcc gttggatgga gatcaacctg cagaccaacc 180
 tgcagagcgt ctgctggacg acatttcatt tgaaaataat cccttttatg atcccgcaca 240
 acggtgttgc aggacttgct tcggttgca accttggtgt ggatgaccag cctcatcaag 300
 tgtctaacga ataagtaaag cgattgcagt ctcggtcaga tttacttttg tattctggtc 360
 taaagattaa tgaccaaact cttcttttga tccggatgta catatatttc tcgattccta 420
 tccaacgcta gataagctaa tcacgacaga tctgattttc tgtcaatgcc ttgctttttg 480
 gtctctcata tcaactctgt ttatatataa tttctcgta ctatatatat atatacacac 540
 acacacacac ggaattccga ttgtccagta ccgttcttgg gatcgaggta ttgctgcgat 600
 ggcttattct gtactctttt cttctgcgct tgatagtgat gtcttctact cccatctgtg 660
 ctaccctctg cttgatcttt gataggcgtg tgcccttcac tggttataaa cccctctgat 720
 cctactctct ggacgcctcg ggggcccaac ctccaaataa agcgacatcc aatgaaaaaa 780

<210> 222
 <211> 66
 <212> PRT
 <213> Conus textile

<400> 222
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Asn Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Leu Asp Asp Ile Ser Phe Glu Asn Asn Pro Phe Tyr
 35 40 45
 Asp Pro Ala Lys Arg Cys Cys Arg Thr Cys Phe Gly Cys Thr Pro Cys
 50 55 60

Cys Gly
 65

<210> 223
 <211> 12
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE

<222> (1)..(12)

<223> Xaa at residue 10 is Pro or Hyp

<400> 223

Cys Cys Arg Thr Cys Phe Gly Cys Thr Xaa Cys Cys
1 5 10

<210> 224

<211> 456

<212> DNA

<213> Conus textile

<400> 224

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ggaacagtca accccacagc cacgccaaga gcagacagcc acagctacgt gaagaagggt      60
ggagagaggt tcatgatgtt gaaaatggga gtggtgctat tcatctttct ggtactgttt      120
cccttggaac cgctccagct ggatgcagat caacctgtag aacgatatgc ggagaacaaa      180
cagctcctca acccagatga aaggagggaa atcctattgc ctgctctgag gaagttctgc      240
tgtgattcga attggtgcc aatttcggat tgtgagtgt gctacgggta gcgccgaaca      300
tccatggcac tgtgctgggc ggtttcatcc caacaacgac agcgtttggt gatttcatgt      360
atcattgcgc ccacgtctct tgtctaagaa tgacgaacat gattgcactc tggttcagat      420
ttcgtgttct tttctgacaa taaatgacaa acctcc                                456

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<210> 225

<211> 70

<212> PRT

<213> Conus textile

<400> 225

Met Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe
1 5 10 15

Pro Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr
20 25 30

Ala Glu Asn Lys Gln Leu Leu Asn Pro Asp Glu Arg Arg Glu Ile Leu
35 40 45

Leu Pro Ala Leu Arg Lys Phe Cys Cys Asp Ser Asn Trp Cys His Asp
50 55 60

Cys Glu Cys Cys Tyr Gly
65 70

<210> 226

<211> 17

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE

<222> (1)..(17)

<223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 is Trp or bromo-Trp; Xaa at residue 17 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 226

Phe Cys Cys Asp Ser Asn Xaa Cys His Ile Ser Asp Cys Xaa Cys Cys
1 5 10 15

Xaa

<210> 227
 <211> 456
 <212> DNA
 <213> Conus textile

<220>
 <221> misc_feature
 <222> (1)..(456)
 <223> n may be any nucleotide

<400> 227
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 ggtggagaga ggttcgtgat gttgaaaatg ggagtgggtgc tattcatctt cctggtactg 120
 tttcccctgg caacgctcca gctggatgca gatcaacctg tagaacgata tgcggagaac 180
 aaacagctcc tcagcccaga tgaaaggagg gaaatcatat tgcattgctct ggggacgcga 240
 tgctgttctt gggatgtgtg cgaccacccg agttgtactt gctgcggtta gcgccgaaca 300
 tocatggcgc tgtgctgggc ggttttatcc caacaacgac agcgtttgtt gatttcatgt 360
 atcattgcgc ccacgtctct tgtctaagaa tgacgaacat gattgcactc tggttcagat 420
 ttctgtttct tttctgacaa taaatgacaa aacncc 456

<210> 228
 <211> 70
 <212> PRT
 <213> Conus textile

<400> 228
 Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe Pro
 1 5 10 15
 Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr Ala
 20 25 30
 Glu Asn Lys Gln Leu Leu Ser Pro Asp Glu Arg Arg Glu Ile Ile Leu
 35 40 45
 His Ala Leu Gly Thr Arg Cys Cys Ser Trp Asp Val Cys Asp His Pro
 50 55 60
 Ser Cys Thr Cys Cys Gly
 65 70

<210> 229
 <211> 15
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 10 is Pro or Hyp; Xaa at residue 4 is Trp or bromo
 -Tr

<400> 229
 Cys Cys Ser Xaa Asp Val Cys Asp His Xaa Ser Cys Thr Cys Cys
 1 5 10 15

<210> 230
 <211> 235
 <212> DNA
 <213> Conus textile

<400> 230
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccctt 60
 actgctcttc cgctggatgg agatcaaccc gcagaccaag ctgcagagcg tatgcaggcc 120
 gagcagcatc ccttgtttga tcagaaaaga cgggtgctgca agtttccatg ccccgatagt 180
 tgcagatatt tgtgttgctg gtgatgataa cgtgttgatg accaactttc tcgag 235

<210> 231
 <211> 67
 <212> PRT
 <213> Conus textile

<400> 231
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15
 Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30
 Gln Ala Ala Glu Arg Met Gln Ala Glu Gln His Pro Leu Phe Asp Gln
 35 40 45
 Lys Arg Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Arg Tyr Leu
 50 55 60
 Cys Cys Gly
 65

<210> 232
 <211> 16
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 3 and 8 is Pro or Hyp; Xaa at residue 13 is Tyr, 1
 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 232
 Arg Cys Cys Lys Phe Xaa Cys Xaa Asp Ser Cys Arg Xaa Leu Cys Cys
 1 5 10 15

<210> 233
 <211> 321
 <212> DNA
 <213> Conus tulipa

<400> 233
 cgacctcaag agggatcgat agcagttcat gtctaaactg _yagtcttgt tgacaatctg 60
 tctgcttctg tttcccttta ctgctctgcc gatggatgga gatgaacctg cagaccgacc 120
 tgcagagcgt atgcaggaca acatttcacg tgagcagcat cccttgtttg aggagagaca 180
 cggatgttgc aagggggcccg aaggatgctc ctccagagaa tgcagacccc aacattgttg 240

gaataagtaa aatgattgca g 321

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<210> 234
<211> 74
<212> PRT
<213> Conus tulipa
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<400> 234
Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
1          5          10          15
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Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asp Arg Pro Ala
20 25 30

Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Leu Phe Glu
35 40 45

Glu Arg His Gly Cys Cys Lys Gly Pro Glu Gly Cys Ser Ser Arg Glu
50 55 60

Cys Arg Pro Gln His Cys Cys Gly Arg Arg
65 70

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<210> 235
<211> 21
<212> PRT
<213> Conus tulipa
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<220>
<221>  PEPTIDE
<222>  (1)..(21)
<223>  Xaa at residue 8 and 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 and 17 is Pro or Hy
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<400> 235
His Gly Cys Cys Lys Gly Xaa Xaa Gly Cys Ser Ser Arg Xaa Cys Arg
1 5 10 15

Xaa Gln His Cys Cys
20

```
<210> 236
<211> 287
<212> DNA
<213> Conus figulinus
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<400> 236
caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttgctga ccatctgtct 60

gcttctgatt ccccttactg ctcttttcgct ggatggagat caacctgcag accgacctgc 120

agagcgtatg caggatggaa ttcatctga acagcatccc atgtttgatc ccgtcagacg 180

gtgttgcccg tggccatgca acataggatg cgtaccttgt tgttgatgac cagtttttgtt 240

atcgcggcct catcaaatgt ctaatgaata agtaaaacga ttgcagt 287

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<210> 237
<211> 67
<212> PRT
<213> Conus figulinus
```

<400> 237

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Ile
1 5 10 15

Pro Leu Thr Ala Leu Ser Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu Gln His Pro Met Phe
35 40 45

Asp Pro Val Arg Arg Cys Cys Pro Trp Pro Cys Asn Ile Gly Cys Val
50 55 60

Pro Cys Cys
65

<210> 238

<211> 14

<212> PRT

<213> Conus figulinus

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Xaa at residue 3, 5 and 12 is Pro or Hyp; Xaa at residue 4 is Trp
or bromo-Tr

<400> 238

Cys Cys Xaa Xaa Xaa Cys Asn Ile Gly Cys Val Xaa Cys Cys
1 5 10

<210> 239

<211> 283

<212> DNA

<213> Conus figulinus

<400> 239

caagaggggat cgatagcagt tcatgatgtt taaactggga gtcctgttga ccatctgtat 60

gcttctgttt ccctttactg ctcttccgct ggatggagag caacctgcag accaacctgc 120

agagcgcacatg cagtatgaca tgttacgtgc aatgaatccc tggtttgatc ccgtcaaaag 180

gtgctgctcg aagaactgcg cagtatgcat cccttggtgc cagtaactga ccagcttgat 240

tatcgcggcc aaggctctaa tgaataagta aaacgattgc agt 283

<210> 240

<211> 67

<212> PRT

<213> Conus figulinus

<400> 240

Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Met Leu Leu Phe
1 5 10 15

Pro Phe Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Ala Asp Gln Pro
20 25 30

Ala Glu Arg Met Gln Tyr Asp Met Leu Arg Ala Met Asn Pro Trp Phe
35 40 45

Asp Pro Val Lys Arg Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Pro
50 55 60

Cys Cys Pro

65

<210> 241
 <211> 14
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 and 14 is Pro or Hyp

<400> 241
 Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Xaa Cys Cys Xaa
 1 5 10

<210> 242
 <211> 286
 <212> DNA
 <213> Conus figulinus

<400> 242
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 gcttctgttt ccccttactg ctcttcgct gaatgaagat caacctgcag agcgtatgca 120
 ggacgacaat tcatctgagc agcaccctt gtatgaccac aaacgaaagt gttgccggtg 180
 gccatgcccc gcaagatgcg gctcttggtg cctgtaataa cgtgttggcc aactttgtta 240
 tcacggccac gtcaaagtgt taatgaataa gtaaacgat tgcagt 286

<210> 243
 <211> 64
 <212> PRT
 <213> Conus figulinus

<400> 243
 Met Met Ser Lys Leu Arg Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asn Glu Asp Gln Pro Ala Glu Arg Met
 20 25 30

Gln Asp Asp Asn Ser Ser Glu Gln His Pro Leu Tyr Asp His Lys Arg
 35 40 45

Lys Cys Cys Arg Trp Pro Cys Pro Ala Arg Cys Gly Ser Cys Cys Leu
 50 55 60

<210> 244
 <211> 15
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 5 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or bromo-Tr

<400> 244
 Cys Cys Arg Xaa Xaa Cys Xaa Ala Arg Cys Gly Ser Cys Cys Leu
 1 5 10 15

<210> 245

<211> 301
 <212> DNA
 <213> Conus figulinus

<400> 245
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 gcttctgttt ccctgactg ctcttccgct ggatgaagat caagctgcag accgacctgc 120
 agagcgtatg cagggcatgt catctgaaca gcatcccttc tttgatcccg tcaaacggtg 180
 ttgcgagttg tcacgctgcc ttggatgcgt cccttgttgc acatcttaat aacgtgtgga 240
 tgaccaactg tgttatcacg gccacgtcaa gtgtctaata aataagtaaa atgattgcag 300
 t 301

<210> 246
 <211> 68
 <212> PRT
 <213> Conus figulinus

<400> 246
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Ala Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Gly Met Ser Ser Glu Gln His Pro Phe Phe Asp
 35 40 45
 Pro Val Lys Arg Cys Cys Glu Leu Ser Arg Cys Leu Gly Cys Val Pro
 50 55 60
 Cys Cys Thr Ser
 65

<210> 247
 <211> 16
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 3 and 12 is Pro or Hyp

<400> 247
 Cys Cys Xaa Leu Ser Arg Cys Leu Gly Cys Val Xaa Cys Cys Thr Ser
 1 5 10 15

<210> 248
 <211> 301
 <212> DNA
 <213> Conus figulinus

<400> 248
 caagagggat cgatagcagt tcatgatgtc taaactggga gccttgttga ccttatgtct 60
 gcttctgttt ccctgactg ctcttccgct ggatgaagat caacctgcag accgacctgc 120
 agagcgtatg cagggcatgt catctgaaca gcatcccttc tttgatcccg tcaaacggtg 180
 ttgcgagttg tcaaaatgcc atggatgcgt cccttgttgc ataccttaat aacgtgcgga 240

tgaccaactg tgttatcacg gccacgtcaa gtgtctaataa aataagtaaa atgattgcag 300

t 301

<210> 249

<211> 68

<212> PRT

<213> Conus figulinus

<400> 249

Met Met Ser Lys Leu Gly Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Gly Met Ser Ser Glu Gln His Pro Phe Phe Asp
35 40 45

Pro Val Lys Arg Cys Cys Glu Leu Ser Lys Cys His Gly Cys Val Pro
50 55 60

Cys Cys Ile Pro
65

<210> 250

<211> 16

<212> PRT

<213> Conus figulinus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 12 and 16 is Pro or Hy

<400> 250

Cys Cys Xaa Leu Ser Lys Cys His Gly Cys Val Xaa Cys Cys Ile Xaa
1 5 10 15

<210> 251

<211> 298

<212> DNA

<213> Conus quercinus

<400> 251

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agagcgtacg caggacattt catctgaaca gtatcgaaag tttgatcaga gacagaggtg 180

ttgccggtgg ccatgccccg gtagttgcag atgctgccgt tatcggttaac gtgttggtga 240

ccagctttgt tatcacgacc acgccaagtg tctaacgaat aagtaaaatg attgcagt 298

<210> 252

<211> 68

<212> PRT

<213> Conus quercinus

<400> 252

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Gln Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro

20

25

30

Ala Glu Arg Thr Gln Asp Ile Ser Ser Glu Gln Tyr Arg Lys Phe Asp
 35 40 45

Gln Arg Gln Arg Cys Cys Arg Trp Pro Cys Pro Gly Ser Cys Arg Cys
 50 55 60

Cys Arg Tyr Arg
 65

<210> 253
 <211> 18
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 7 and 9 is Pr
 o or Hyp; Xaa at residue 6 is Trp or bromo-Trp; Xaa at residue 17
 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
 phospho-Ty

<400> 253
 Xaa Arg Cys Cys Arg Xaa Xaa Cys Xaa Gly Ser Cys Arg Cys Cys Arg
 1 5 10 15

Xaa Arg

<210> 254
 <211> 313
 <212> DNA
 <213> Conus quercinus

<400> 254
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 agagcgacct gcagagcgta cgcaggacga cattcagcag catcogttat atgatccgaa 180
 aagaaggtgt tgccgttatc catgccccga cagctgccac ggatcttgct gctataagtg 240
 ataacatggt gatggccagc tttgttatca cggccacgtc aagtgtctaa tgaataagta 300
 aaacgattgc agt 313

<210> 255
 <211> 72
 <212> PRT
 <213> Conus quercinus

<400> 255
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Ser
 20 25 30

Ala Glu Arg Pro Ala Glu Arg Thr Gln Asp Asp Ile Gln Gln His Pro
 35 40 45

Leu Tyr Asp Pro Lys Arg Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser
 50 55 60

Cys His Gly Ser Cys Cys Tyr Lys
65 70

<210> 256
<211> 18
<212> PRT
<213> Conus quercinus

<220>
<221> PEPTIDE
<222> (1)..(18)
<223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 and 17 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 256
Arg Cys Cys Arg Xaa Xaa Cys Xaa Asp Ser Cys His Gly Ser Cys Cys
1 5 10 15

Xaa Lys

<210> 257
<211> 256
<212> DNA
<213> Conus wittigi

<400> 257
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccatt 60
actgctcttc cgggtgggtgg agatcagcct gcagaccgac ttgcagagcg tatgcaggac 120
gacacttcat ctgagcagca tccctttgaa aagagactac catcatgttg cgactttgag 180
aggctttgcg tagtaccagc atgcatacgt catcagtgtt gcacaggata acgtgttgat 240
gaccaacttt ctcgag 256

<210> 258
<211> 74
<212> PRT
<213> Conus wittigi

<400> 258
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15
Pro Ile Thr Ala Leu Pro Val Gly Gly Asp Gln Pro Ala Asp Arg Leu
20 25 30
Ala Glu Arg Met Gln Asp Asp Thr Ser Ser Glu Gln His Pro Phe Glu
35 40 45
Lys Arg Leu Pro Ser Cys Cys Asp Phe Glu Arg Leu Cys Val Val Pro
50 55 60

Ala Cys Ile Arg His Gln Cys Cys Thr Gl..
65 70

<210> 259
<211> 23
<212> PRT
<213> Conus wittigi

<220>

<221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 8 is Glu or gamma-carboxy Glu; Xaa at residue 2 and 14 is Pro or Hy

<400> 259
 Leu Xaa Ser Cys Cys Asp Phe Xaa Arg Leu Cys Val Val Xaa Ala Cys
 1 5 10 15

Ile Arg His Gln Cys Cys Thr
 20

<210> 260
 <211> 14
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Tr

<400> 260
 Cys Cys Lys Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys Xaa
 1 5 10

<210> 261
 <211> 259
 <212> DNA
 <213> Conus tulipa

<220>
 <221> misc_feature
 <222> (1)..(259)
 <223> n may be any nucleotide

<400> 261
 ggatccatga tgtctaaact gggagtcttg ttgacaatct gtctgcttct gtttcccctt 60
 actgctctgc cgatggatgg agatgaacct gcagaccgac ctgcagagcg tatgcaggac 120
 aacatttcat ctgagcagca tcccttggtt gaggagagac acggatgttg cgagggggcg 180
 aagggatgct cctccagaga atgcagaccc caacattgtt gcggtcgacg ataacgtggt 240
 gatgaccaac tntctcgag 259

<210> 262
 <211> 75
 <212> PRT
 <213> Conus tulipa

<400> 262
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Leu Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Glu Glu Arg His Gly Cys Cys Glu Gly Pro Lys Gly Cys Ser Ser Arg
 50 55 60

Glu Cys Arg Pro Gln His Cys Cys Gly Arg Arg
65 70 75

<210> 263
<211> 21
<212> PRT
<213> Conus tulipa

<220>
<221> PEPTIDE
<222> (1)..(21)
<223> Xaa at residue 5 and 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 and 17 is Pro or Hy

<400> 263
His Gly Cys Cys Xaa Gly Xaa Lys Gly Cys Ser Ser Arg Xaa Cys Arg
1 5 10 15

Xaa Gln His Cys Cys
20

<210> 264
<211> 262
<212> DNA
<213> Conus aurisiacus

<220>
<221> misc_feature
<222> (1)..(262)
<223> n may be any nucleotide

<400> 264
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttccccc 60
actgcttttc cgatggatgg agatcaacct gcagaccaac ctgcagatcg tatgcaggac 120
gacatttcac ctgagcagta tcccttgitt gataagagac aaaagtgttg cactgggagg 180
aaggggtcat gctccggcaa agcatgcaaa aatctcaa atgtgtctctgg acgataacgt 240
gttgatgacc aactttctcg an 262

<210> 265
<211> 76
<212> PRT
<213> Conus aurisiacus

<400> 265
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15
Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30
Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45
Asp Lys Arg Gln Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly
50 55 60
Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
65 70 75

<210> 266

<211> 23
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu

<400> 266
 Xaa Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 267
 <211> 239
 <212> DNA
 <213> Conus betulinus

<400> 267
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
 actgctgttc cgttggatgg agatcaacct gcagaccaac ctgcagagcg tatgcagaac 120
 gaggcagcatc cctcgtttga tcagaaaaga aggtgctgcc ggtggccatg cccagtata 180
 tgcgggcatgg ctaggtgttg cttcgtcatg ataacgtgtt gatgaccaac tttctcgag 239

<210> 268
 <211> 71
 <212> PRT
 <213> Conus betulinus

<400> 268
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Met Gln Asn Glu Gln His Pro Ser Phe Asp Gln Lys Arg
 35 40 45

Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
 50 55 60

Cys Phe Val Met Ile Thr Cys
 65 70

<210> 269
 <211> 23
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 is Trp or bromo-Tr

<400> 269
 Arg Cys Cys Arg Xaa Xaa Cys Xaa Ser Ile Cys Gly Met Ala Arg Cys
 1 5 10 15

<210>	273
<211>	262
<212>	DNA
<213>	Conus parius

<210>	274
<211>	76
<212>	PRT
<213>	Conus parius

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<210> 275
<211> 24
<212> PRT
<213> Conus parius

<220>
<221> PEPTIDE
<222> (1)..(24)
<223> Xaa at residue 7, 8, 18 and 24 is Pro or Hyp
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<210> 276
<211> 259
<212> DNA
<213> Conus parius
<400> 276
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
actgctcttc cgatggatgg tgatcaacct gcagaccgac ctgtagagcg tatgcaggac 120
aacatttcat ctgagcagca tcccttcttt gaaaagagaa gaggctgttg cacacctccg 180
aggaaatgca aagaccgagc ctgcaaacct gcacgttggt gcggcccagg ataacgtggt 240
gatgaccaac tttctcgag
259

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<400>      277
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1                               10                          15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
          20                25              30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
        35                      40                    45

Glu Lys Arg Arg Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg
   50                  55              60

Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65           70             75
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<220>
<221>  PEPTIDE
<222>  (1)..(23)
<223>  Xaa at residue 6, 7, 17 and 23 is Pro or Hyp

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<210> 279
<211> 241
<212> DNA
<213> Conus coronatus
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<210> 280
<211> 68
<212> PRT
<213> Conus coronatus
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<400> 280
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1          5          10         15
Pro Ile Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
          20         25         30

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Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Asp Trp Pro Cys Ile Pro Gly Cys Thr Pro
 50 55 60

Cys Cys Leu Pro
 65

<210> 281
 <211> 16
 <212> PRT
 <213> Conus coronatus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5, 8, 12 and 16 is Pro or Hyp; Xaa at residue 4 is
 Trp or bromo-Tr

<400> 281
 Cys Cys Asp Xaa Xaa Cys Ile Xaa Gly Cys Thr Xaa Cys Cys Leu Xaa
 1 5 10 15

<210> 282
 <211> 244
 <212> DNA
 <213> Conus musicus

<400> 282
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttctcttt 60
 tctgtctcttc cgatggatga agatcaactt gcagacctac ctgcagagcg tatgcggggac 120
 actgcaactg tagatcatcc ctctatgat cctgacaaag cgtgctgcga gcagagctgt 180
 acaacatgct ttccgtgctg ctagccttga acacagtaac gtgttgatga ccaactttct 240
 cgag 244

<210> 283
 <211> 65
 <212> PRT
 <213> Conus musicus

<400> 283
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Ser Ala Leu Pro Met Asp Glu Asp Gln Leu Ala Asp Leu Pro
 20 25 30

Ala Glu Arg Met Arg Asp Thr Ala Thr Val Asp His Pro Ser Tyr Asp
 35 40 45

Pro Asp Lys Ala Cys Cys Glu Gln Ser Cys Thr Thr Cys Phe Pro Cys
 50 55 60

Cys
 65

<210> 284
 <211> 14
 <212> PRT

<213> Conus musicus

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Xaa at residue4 is Glu or gamma-carboxy Glu; Xaa at residue 12 is Pro or Hy

<400> 284

Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Phe Xaa Cys Cys
1 5 10

<210> 285

<211> 14

<212> PRT

<213> Conus betulinus

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Xaa at residue 4 is Glu or gamma-carboxy Glu; Xaa at residue 12 is Pro or Hy

<400> 285

Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys
1 5 10

<210> 286

<211> 14

<212> PRT

<213> Conus betulinus

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Tr

<400> 286

Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys Xaa
1 5 10

<210> 287

<211> 235

<212> DNA

<213> Conus pennaceus

<400> 287

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccctt 60
actgctcttc cgctggatgg agatcaacct gcataccaag ctgcagagcg tatgcaggcc 120
gagcatcatc ccttgtttga tcagaaaaga cgggtgtgca agtttccatg ccccgatagt 180
tgcaaatatt tgtgttgcgg gtgatgataa catgttgatg accaactttc ttgag 235

<210> 288

<211> 65

<212> PRT

<213> Conus pennaceus

<400> 288

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Tyr Gln Ala
20 25 30

Ala Glu Arg Met Gln Ala Glu His His Pro Leu Phe Asp Gln Lys Arg
35 40 45

Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Lys Tyr Leu Cys Cys
50 55 60

Gly
65

<210> 289

<211> 16

<212> PRT

<213> Conus pennaceus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 13 is Tyr, 1
25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 289

Arg Cys Cys Lys Phe Xaa Cys Xaa Asp Ser Cys Lys Xaa Leu Cys Cys
1 5 10 15

<210> 290

<211> 241

<212> DNA

<213> Conus pulicarius

<400> 290

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
actgctcttc cgatggatgg tgatcaactt gcagaccgac ttgtagagcg tatgcaggac 120
aacatttcat ctgagcagca tcccttcttt gatcccgta aacggtgttg cgtcagctgt 180
tacatgggat gcatcccttg ttgcttctag taataacgtg ttgatgacca actttctcga 240
g 241

<210> 291

<211> 67

<212> PRT

<213> Conus pulicarius

<400> 291

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Asp Arg Leu
20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Lys His Pro Phe Phe
35 40 45

Asp Pro Val Lys Arg Cys Cys Val Ser Cys Tyr Met Gly Cys Ile Pro
50 55 60

Cys Cys Phe
65

<210> 292
 <211> 14
 <212> PRT
 <213> Conus pulicarius

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 292
 Cys Cys Val Ser Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10

<210> 293
 <211> 244
 <212> DNA
 <213> Conus pulicarius

<400> 293
 ggatccatga tgtctaaact gggagtcttg ttgaccgtct gtctgcttct gtgtccctt 60
 actgctcttc cactggatga agatcaactt gcagaccgac ctgcagagcg tatgcaggat 120
 gacacttcag ctgcacagat tttcgggttt gatcccgta aacggtgctg caaattgcta 180
 tgctactcgg gatgcactcc ttgttgccat atttgataac gtgttgatga ccaactttct 240
 cgag 244

<210> 294
 <211> 67
 <212> PRT
 <213> Conus pulicarius

<400> 294
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu Cys
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Leu Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Thr Ser Ala Ala Gln Ile Phe Gly Phe
 35 40 45
 Asp Pro Val Lys Arg Cys Cys Lys Leu Leu Cys Gly Cys Thr Pro Cys
 50 55 60
 Cys His Ile
 65

<210> 295
 <211> 16
 <212> PRT
 <213> Conus pulicarius

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 295
 Cys Cys Lys Leu Leu Cys Xaa Ser Gly Cys Thr Xaa Cys Cys His Ile

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1 5 10 15

<210> 296
 <211> 259
 <212> DNA
 <213> Conus rattus

<400> 296
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttgt gtttccgctt 60
 actgctcttc cgatggatgg tgatcaacct gcagaccgac ttgtagagcg tatacaggac 120
 aacatttcat ctgagcagca tcccttcttt gaaaagagaa gaggctgttg cgcaacctcg 180
 aggaaatgca aagaccgagc ctgcaaacct gcacgttgct gcggcccagg ataacgtgtt 240
 gatgaccaac tttctcgag 259

<210> 297
 <211> 75
 <212> PRT
 <213> Conus rattus

<400> 297
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Val Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30
 Val Glu Arg Ile Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45
 Glu Lys Arg Arg Gly Cys Cys Ala Pro Pro Arg Lys Cys Lys Asp Arg
 50 55 60
 Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65 70 75

<210> 298
 <211> 23
 <212> PRT
 <213> Conus rattus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6, 7, 17 and 23 is Pro or Hyp

<400> 298
 Arg Gly Cys Cys Ala Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys Lys
 1 5 10 15
 Xaa Ala Arg Cys Cys Gly Xaa
 20

<210> 299
 <211> 262
 <212> DNA
 <213> Conus stercusmuscarum

<400> 299
 ggatccatga tgtctaaact gggagtcttg ttgacaatct gtctgcttct gtttcccctt 60
 attgctcttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg tatgcaggac 120

gacatttcat ctgagaagca tcccttggtt gataagagac aacggtgttg caatgggcgg 180
 aggggatgct ccagcagatg gtgcagagat cactcacgtt gttgcggtcg acgataacgt 240
 gttgatgacc aactttctcg ag 262

<210> 300
 <211> 76
 <212> PRT
 <213> Conus stercusmuscarum

<400> 300
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Ile Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Lys His Pro Leu Phe
 35 40 45
 Asp Lys Arg Gln Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg
 50 55 60
 Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 301
 <211> 22
 <212> PRT
 <213> Conus stercusmuscarum

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 14 is Trp or
 bromo-Tr

<400> 301
 Xaa Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg Xaa Cys Arg
 1 5 10 15
 Asp His Ser Arg Cys Cys
 20

<210> 302
 <211> 241
 <212> DNA
 <213> Conus ebraceus

<400> 302
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccctt 60
 actgctcttc cactggatga aggtcaacct gcagacctac ctgcagagcg tatgcaggac 120
 attgcaactg aacagcatcc cttgtttgat cctgtcaaac ggtgttgca gcagccatgc 180
 tacatgggat gcatcccttg ttgcttctaa taataacgtg ttgatgacca actttctcga 240
 g 241

<210> 303
 <211> 67
 <212> PRT

<213> Conus ebraceus

<400> 303

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Gly Gln Pro Ala Asp Leu Pro
20 25 30

Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
35 40 45

Pro Val Lys Arg Cys Cys Glu Gln Pro Cys Tyr Met Gly Cys Ile Pro
50 55 60

Cys Cys Phe
65

<210> 304

<211> 15

<212> PRT

<213> Conus ebraceus

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 304

Cys Cys Xaa Gln Xaa Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
1 5 10 15

<210> 305

<211> 241

<212> DNA

<213> Conus ebraceus

<400> 305

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actgctcttc cactggatga agatcaacct gcagacctac ctgcagagcg tatgcaggac 120

attgcaactg aacagcatcc cttgtttgat cctgtcaaac ggtgctgcmc gcagccatgc 180

tacatgggat gcatcccttg ttgcttctaa taataacgtg ttgatgacca actttctcga 240

g 241

<210> 306

<211> 67

<212> PRT

<213> Conus ebraceus

<400> 306

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Leu Pro
20 25 30

Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
35 40 45

Pro Val Lys Arg Cys Cys Ala Gln Pro Cys Tyr Met Gly Cys Ile Pro

50

55

60

Cys Cys Phe
65

<210> 307
<211> 15
<212> PRT
<213> Conus ebraceus

<220>
<221> PEPTIDE
<222> (1)..(15)
<223> Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 1
25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 307

Cys Cys Ala Gln Xaa Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
1 5 10 15

<210> 308
<211> 238
<212> DNA
<213> Conus flavidus

<400> 308
ggatccatga tgtctaaact gggagtcttg ttgacatct gtctgcttct gtttcccctt 60
actgctgttc cgttgatgg agatcaacct gcagaccagc ctgcagagcg tatgcagaac 120
gagcagcatc ccttgtttga tcagaaaaga aggtgctgcc ggtggccatg cccagtata 180
tgcggcatgg ctaggtgttg ctgcatga taacgtgttg atgaccaact ttctcgag 238

<210> 309
<211> 67
<212> PRT
<213> Conus flavidus

<400> 309

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Glu Arg Met Gln Asn Glu Gln His Pro Leu Phe Asp Gln Lys Arg
35 40 45

Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
50 55 60

Cys Ser Ser
65

<210> 310
<211> 19
<212> PRT
<213> Conus flavidus

<220>
<221> PEPTIDE
<222> (1)..(19)
<223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 is Trp or

bromo-Tr

<400> 310

Arg Cys Cys Arg Xaa Xaa Cys Xaa Ser Ile Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Ser Ser

<210> 311

<211> 245

<212> DNA

<213> Conus miliaris

<220>

<221> misc_feature

<222> (1)..(245)

<223> n may be any nucleotide

<400> 311

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actgcccttc cactggatga agatcaacct gcagaccgac ctgcagagcg tatgcaggac 120

attgcaactg aacagcatcc cttgtttgat cccgtcaaac ggtgttgcca ttggccatgc 180

agcgcaggat gctacccttg ttgcttcctt taataacgtg ttgatgacca actnangnaa 240

aaaaa 245

<210> 312

<211> 68

<212> PRT

<213> Conus miliaris

<400> 312

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Ile Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Asp Trp Pro Cys Ser Ala Gly Cys Tyr Pro
 50 55 60

Cys Cys Phe Pro

65

<210> 313

<211> 16

<212> PRT

<213> Conus miliaris

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 5, 12 and 16 is Pro or Hyp; Xaa at residue 4 is Trp or bromo-Trp; Xaa at residue 11 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 313

Cys Cys Asp Xaa Xaa Cys Ser Ala Gly Cys Xaa Xaa Cys Cys Phe Xaa
 1 5 10 15

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<220>
<221> misc_feature
<222> (1)..(230)
<223> n may be any nucleotide
<400> 314
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<210> 315
<211> 66
<212> PRT
<213> Conus miliaris
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Phe Arg
65

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<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 4, 9 and 12 is Pro or Hyp; Xaa at residue 5 is Tyr
      , 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho
      -Tyr
```

<210> 317
<211> 295
<212> DNA
<213> *Conus ammiralis*

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<400> 317
caagagggat cgatagcagt tcgatggtc taaactggga gtcttggtga ccatctgtct 60
gcttctgttt ccccttactg ctcttccgct ggatggagat caacctgcag accaagctgc 120
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agagcgtatg caggccgagc agcatccctt gtttgatcag aaaagacggt gttgcagggt 180
tccatgcccc gataacttgca gacatttgtg ttgcgggtga tgataacgtg ctgatgaccc 240
actttgtcat cacggctacg tcaagtgtct aatgaataa; taaaatgatt gcagt 295
<210> 318
<211> 65
<212> PRT
<213> Conus ammiralis

<400> 318
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15
Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Ala
20 25 30
Ala Glu Arg Met Gln Ala Glu Gln His Pro Leu Phe Asp Gln Lys Arg
35 40 45
Arg Cys Cys Arg Phe Pro Cys Pro Asp Thr Cys Arg His Leu Cys Cys
50 55 60
Gly
65

<210> 319
<211> 16
<212> PRT
<213> Conus ammiralis

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 6 and 8 is Pro or Hyp

<400> 319
Arg Cys Cys Arg Phe Xaa Cys Xaa Asp Thr Cys Arg His Leu Cys Cys
1 5 10 15

<210> 320
<211> 267
<212> DNA
<213> Conus ammiralis

<400> 320
caagagggat cgatagcagt tcatgatgtt taaactggga gtcttgctga ccatctgtct 60
acttctgttt tcccttaatg ctgttccgct ggatggagat caacctgcag accaacctgc 120
agagcgtctg ctggacgaca ttcatctga aaataatccc ttttatgatc ccgccaaacg 180
gtgttgcatg acttgcttcg gttgcacacc ttgttgtgga tgaccagcct catcaagtgt 240
ctaacgaata agtaaaacga ttgcagt 267

<210> 321
<211> 66
<212> PRT
<213> Conus ammiralis

<400> 321
Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

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<210>	325
<211>	18

<212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 325
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
 1 5 10 15

Phe Ser

<210> 326
 <211> 284
 <212> DNA
 <213> Conus ammiralis

<400> 326
 caagagggat cgatagcagt tcatgatgtt taaactcgga gtcttgctga ccatctgtct 60
 acttctgttt tccctaattg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 agagcgtctg caggaccgcc ttccaactga aaatcatccc ttatatgata ccgtcaaacg 180
 gtgttgacgg ttgttatgcc tcagttgcaa cccttggtgt ggatgaccag ctttgttata 240
 acggcctcat caagtgtcta atgaataagt aaaacgattg cagt 284

<210> 327
 <211> 67
 <212> PRT
 <213> Conus ammiralis

<400> 327
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Ile Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45
 Asp Pro Val Lys Arg Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Pro
 50 55 60
 Cys Cys Gly
 65

<210> 328
 <211> 13
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(13)
 <223> Xaa at residue 11 is Pro or Hyp

<400> 328

Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Xaa Cys Cys
 1 5 10

<210> 329
 <211> 289
 <212> DNA
 <213> Conus ammiralis

<400> 329
 caagaaggat cgatagcagt tcatgatgtc taaactggga gccttggtga ccatctgtct 60
 acttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 agagcgtctg caggaccgca ttccaactga agatcatccc ttatttgatc ccaacaaacg 180
 gtgttgcgat gattcggaaat gcggctattc atgctggcct tgctgttatg gataagcttt 240
 gttatcgcgg cctcatccag tgtcaacgaa taagtaaaac gattgcagt 289

<210> 330
 <211> 70
 <212> PRT
 <213> Conus ammiralis

<400> 330
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
 35 40 45
 Asp Pro Asn Lys Arg Cys Cys Asp Asp Ser Glu Cys Gly Tyr Ser Cys
 50 55 60
 Trp Pro Cys Cys Tyr Gly
 65 70

<210> 331
 <211> 16
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 and 16 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 331
 Cys Cys Asp Asp Ser Xaa Cys Gly Xaa Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 332
 <211> 272
 <212> DNA
 <213> Conus spurius

<400> 332
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttgctga ccatctgtct 60

gcttctgttt ccacgtactt ctcttccgct ggatggagat caacctgcag tccgatctgc 120
 aaagcgtatg cattcatcta tacagcgtcg tttctttgat cccgtcaaac ggtgttgccc 180
 tagatgcagc gaggcgaacc cttgttgtgg atgaccagct ttgtcatcgc ggcctcatta 240
 agtgtctaata gaataagtaa aatgattgca gt 272

<210> 333
 <211> 63
 <212> PRT
 <213> Conus spurius

<400> 333
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Arg Thr Ser Leu Pro Leu Asp Gly Asp Gln Pro Ala Val Arg Ser
 20 25 30

Ala Lys Arg Met His Ser Ser Ile Gln Arg Arg Phe Phe Asp Pro Val
 35 40 45

Lys Arg Cys Cys Pro Arg Cys Ser Glu Cys Asn Pro Cys Cys Gly
 50 55 60

<210> 334
 <211> 12
 <212> PRT
 <213> Conus spurius

<220>
 <221> PEPTIDE
 <222> (1)..(12)
 <223> Xaa at residue 7 is Glu or gamma-carboxy Glu; Xaa at residue 3 and 10 is Pro or Hy

<400> 334
 Cys Cys Xaa Arg Cys Ser Xaa Cys Asn Xaa Cys Cys
 1 5 10

<210> 335
 <211> 293
 <212> DNA
 <213> Conus omaria

<400> 335
 caagagggat cgatagcagt tcatgatgtc taaactggga gtctcgttga ccatctgtct 60
 acttctatatt tcccttactg ctgttccgct tgatggagat caacatgcag accaacctgc 120
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttaatc cccgtcaaacg 180
 gtgttgcgat gaggaagaat gcagcagtg atgctggcct tgttgttggg ggtgatcagc 240
 tttgttatcg cggcctcatc aagtgtctaa tgaataagta aatgattgc agt 293

<210> 336
 <211> 70
 <212> PRT
 <213> Conus omaria

<400> 336
 Met Met Ser Lys Leu Gly Val Ser Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
35 40 45

Asn Pro Val Lys Arg Cys Cys Asp Glu Glu Glu Cys Ser Ser Ala Cys
50 55 60

Trp Pro Cys Cys Trp Gly
65 70

<210> 337

<211> 16

<212> PRT

<213> Conus omaria

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 4, 5 and 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Tr

<400> 337

Cys Cys Asp Xaa Xaa Xaa Cys Ser Ser Ala Cys Xaa Xaa Cys Cys Xaa
1 5 10 15

<210> 338

<211> 293

<212> DNA

<213> Conus omaria

<400> 338

caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggtga tcatctgtct 60

acttctgtgt ccccttactg ctgttctgga ggatggagat caacctgcag accgacctgc 120

agagcgtatg caggacgaca tttcaactga gcatcatccc ttttatgatc ccgtcaaacg 180

gtgttgcaag tacgggtgga catgcttgct aggatgcact ccttgtgatt gttgaccagt 240

tttgttatcg cggcctcgtc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 339

<211> 70

<212> PRT

<213> Conus omaria

<400> 339

Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Cys
1 5 10 15

Pro Leu Thr Ala Val Leu Glu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Thr Glu His His Pro Phe Tyr
35 40 45

Asp Pro Val Lys Arg Cys Cys Lys Tyr Gly Trp Thr Cys Leu Leu Gly
50 55 60

Cys Thr Pro Cys Asp Cys
65 70

<210> 340
 <211> 17
 <212> PRT
 <213> Conus omaria

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue is 14 Pro or Hyp; Xaa at residue 6 is Trp or bromo-
 -Trp; Xaa at residue 4 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr,
 O-sulpho-Tyr or O-phospho-Ty

<400> 340
 Cys Cys Lys Xaa Gly Xaa Thr Cys Leu Leu Gly Cys Thr Xaa Cys Asp
 1 5 10 15

Cys

<210> 341
 <211> 290
 <212> DNA
 <213> Conus omaria

<400> 341
 caagagggat cgatagcagt tcatgatgtc tatactggga gtcttggtga tcatctgtct 60
 acttctgtgt ccccttactg ctgttctgga ggatggagat caacctgcag accgacctgc 120
 agagcgtatg caggacggca tttcatctga acatcatccc tttttggatc ccgtcaaacg 180
 gtgttgccat ctattggcat gccgctttgg atgctgcgct tgttggtggt gaccagcttt 240
 gttatcgagg cctcatcaag tgtctaata gaataagtaaaa cgattgcagt 290

<210> 342
 <211> 69
 <212> PRT
 <213> Conus omaria

<400> 342
 Met Met Ser Ile Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Cys
 1 5 10 15
 Pro Leu Thr Ala Val Leu Glu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu His His Pro Phe Leu
 35 40 45

Asp Pro Val Lys Arg Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys
 50 55 60

Ser Pro Cys Cys Trp
 65

<210> 343
 <211> 16
 <212> PRT
 <213> Conus omaria

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 13 is Pro or Hyp; Xaa at residue 16 is Trp or bromo-
 o-Tr

<210> 344
<211> 293
<212> DNA
<213> *Conus omaria*

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<210> 345
<211> 70
<212> PRT
<213> Conus omaria
```

```
<210> 346
<211> 17
<212> PRT
<213> Conus omaria
```

```
<400> 346
Cys Cys Arg Xaa Gly Xaa Thr Cys Xaa Leu Gly Cys Thr Xaa Cys Gly
1          5          10          15
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<210>	347
<211>	293
<212>	DNA
<213>	Conus episcopatus

<400> 347
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
 acttctgttt tcccttattg ctgttccgct tgatggagat caacatgcag accaacctgc 120
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttatgc ctgtcaaacg 180
 gtgttgcgat gaggacgaat gcaacagttc atgctggcct tgttggtggg ggtgatcagc 240
 tttgttatcg cggcctgac aagtgtataa tgaataagta aaacgattgc agt 293

<210> 348
 <211> 70
 <212> PRT
 <213> Conus episcopatus

<400> 348
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Ile Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
 35 40 45
 Met Pro Val Lys Arg Cys Cys Asp Glu Asp Glu Cys Asn Ser Ser Cys
 50 55 60
 Trp Pro Cys Cys Trp Gly
 65 70

<210> 349
 <211> 16
 <212> PRT
 <213> Conus episcopatus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 6 is Glu or gamma-carboxy Glu; Xaa at residue
 e 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Trp

<400> 349
 Cys Cys Asp Xaa Asp Xaa Cys Asn Ser Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 350
 <211> 293
 <212> DNA
 <213> Conus episcopatus

<400> 350
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
 acttctgttt tcccttattg ctgttccgct tgatggagat caacatgcag accaacctgc 120
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttatgc ctgtcaaacg 180
 gtgttgcgat gaggacgaat gcagcagttc atgctggcct tgttggtggg gatgagcagc 240
 tttgttatcg cggcctcatc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 351
 <211> 70

<212> PRT
 <213> Conus episcopatus

<400> 351
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Ile Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
 35 40 45
 Met Pro Val Lys Arg Cys Cys Asp Glu Asp Glu Cys Ser Ser Ser Cys
 50 55 60
 Trp Pro Cys Cys Trp Gly
 65 70

<210> 352
 <211> 16
 <212> PRT
 <213> Conus episcopatus
 <220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue4 and 6 is Glu or gamma-carboxy Glu; Xaa at residu
 e 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Trp

<400> 352
 Cys Cys Asp Xaa Asp Xaa Cys Ser Ser Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 353
 <211> 290
 <212> DNA
 <213> Conus episcopatus

<400> 353
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
 acttctgttt tcccttactg ctgttcgcgt tgatggagat caacatgcag accaacctgc 120
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttaatc ccgtcaaacg 180
 gtgttgcccg gcggcggcat gtgccatggg atgcaagcct tgttggtgat gagcagcttt 240
 gttatcgtgg cctcatcaag tgtctaataa ataagtaaaa cgattgcagt 290

<210> 354
 <211> 69
 <212> PRT
 <213> Conus episcopatus

<400> 354
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
 35 40 45

Asn Pro Val Lys Arg Cys Cys Pro Ala Ala Ala Cys Ala Met Gly Cys
 50 55 60

Lys Pro Cys Cys Gly
 65

<210> 355
 <211> 15
 <212> PRT
 <213> Conus episcopatus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 and 13 is Pro or Hyp

<400> 355
 Cys Cys Xaa Ala Ala Cys Ala Met Gly Cys Lys Xaa Cys Cys
 1 5 10 15

<210> 356
 <211> 295
 <212> DNA
 <213> Conus aulicus

<400> 356
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
 gcttctgttt tccgttactg ctcttccgcc ggatggagat caacctgcag accgagctgc 120
 agagcgtagg caggctcgagc agcatcccggt gtttgatcat gaaagaggggt gttgctcgcc 180
 accatgccac agtattttgcg ctgctttctg ttgcgggtga tgataacgtg ttgatgaccc 240
 actttgtcat cacggctgcg tcaagtgtct aatgaataag taaaatgatt gcagt 295

<210> 357
 <211> 65
 <212> PRT
 <213> Conus aulicus

<400> 357
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Val Thr Ala Leu Pro Pro Asp Gly Asp Gln Pro Ala Asp Arg Ala
 20 25 30

Ala Glu Arg Arg Gln Val Glu Gln His Pro Val Phe Asp His Glu Arg
 35 40 45

Gly Cys Cys Ser Pro Pro Cys His Ser Ile Cys Ala Ala Phe Cys Cys
 50 55 60

Gly
 65

<210> 358
 <211> 16
 <212> PRT
 <213> Conus aulicus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5 and 6 is Pro or Hyp

<400> 358

Gly Cys Cys Ser Xaa Xaa Cys His Ser Ile Cys Ala Ala Phe Cys Cys
1 5 10 15

<210> 359

<211> 290

<212> DNA

<213> Conus aulicus

<400> 359

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60

acttctgttt tcccttactg ctgttccgct tgatggagat caacatgcag accaacctgc 120

agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttaatc ccgtcaaacg 180

gtgttgccga ccggtggcat gtgccatggg atgcaagcct tgttggtgat gagcagcttt 240

gttatcgtgg cctcatcaag tgtctaataa ataagtaaaa tgattgcagt 290

<210> 360

<211> 69

<212> PRT

<213> Conus aulicus

<400> 360

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
35 40 45

Asn Pro Val Lys Arg Cys Cys Arg Pro Val Ala Cys Ala Met Gly Cys
50 55 60

Lys Pro Cys Cys Gly
65

<210> 361

<211> 15

<212> PRT

<213> Conus aulicus

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 361

Cys Cys Arg Xaa Val Ala Cys Ala Met Gly Cys Lys Xaa Cys Cys
1 5 10 15

<210> 362

<211> 290

<212> DNA

<213> Conus aulicus

<400> 362

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga tcatctgtct 60

acttctgtct ccccttactg ctgttccgct ggatggagat caacctgcag accgacctgc 120

agagcgtatg caggacgaca tttcatctga acatcaaccc atgtttgatg ccatcagaca 180
 gtgttgcccg gcggtggcat gcgccatggg atgcgagcct tgttgtggat gaccagcttt 240
 gttatcgcgg cctcatcaag tgtctaata gaataagtaaa tgattgcagt 290

<210> 363
 <211> 69
 <212> PRT
 <213> Conus aulicus

<400> 363
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Ser
 1 5 10 15
 Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His Gln Pro Met Phe
 35 40 45
 Asp Ala Ile Arg Gln Cys Cys Pro Ala Val Ala Cys Ala Met Gly Cys
 50 55 60
 Glu Pro Cys Cys Gly
 65

<210> 364
 <211> 16
 <212> PRT
 <213> Conus aulicus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 13 is Glu or
 gamma-carboxy Glu; Xaa at residue 4 and 14 is Pro or Hy

<400> 364
 Xaa Cys Cys Xaa Ala Val Ala Cys Ala Met Gly Cys Xaa Xaa Cys Cys
 1 5 10 15

<210> 365
 <211> 293
 <212> DNA
 <213> Conus aureus

<400> 365
 caagaaggat cgatagcagt tcatgatgtc taaactggga gccttgttga ccatctgtct 60
 acttctgttt tccottactg ctgttccgct ggatggagat caacatgcag accaacaatgc 120
 agagcgtctg catgaccgcc ttccaactga aaatcatccc ttatatgatc ccgtcaaaacg 180
 gtgttgcgat gattcggaat gcgactattc ttgctggcct tgctgtattt ttggataacc 240
 tttgttatcg cggcctcatc aagtgtcaaa tgaataagta aaacgattgc agt 293

<210> 366
 <211> 71
 <212> PRT
 <213> Conus aureus

<400> 366

Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln His
 20 25 30
 Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45
 Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60
 Trp Pro Cys Cys Ile Phe Gly
 65 70

<210> 367
 <211> 17
 <212> PRT
 <213> Conus aureus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is
 s Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at resid
 ue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr o
 r O-phospho-Ty

<400> 367
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
 1 5 10 15

Phe

<210> 368
 <211> 290
 <212> DNA
 <213> Conus aureus

<400> 368
 caagaggggat cgatagcagt tcatgatgtc taaactggga gccttggtga ccatctgtct 60
 acttctgttt tccctaactg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 agagcgtctg caggaccgca ttccaactga aaatcatccc ttatttgatc cgaacaaacg 180
 gtgttgcaat gattgggaat gcgacgattc atgctggcct tgctgttatg gataaccttt 240
 gttatcgcgg cctcatcaag tgtcaaataa ataagtaaaa cgattgcagt 290

<210> 369
 <211> 70
 <212> PRT
 <213> Conus aureus

<400> 369
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Asp Arg Ile Pro Thr Glu Asn His Pro Leu Phe
 35 40 45

Asp Pro Asn Lys Arg Cys Cys Asn Asp Trp Glu Cys Asp Asp Ser Cys
 50 55 60

Trp Pro Cys Cys Tyr Gly
 65 70

<210> 370
 <211> 16
 <212> PRT
 <213> Conus aureus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 5 and 12 is Trp or bromo-Trp; Xaa at residue 16 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 370
 Cys Cys Asn Asp Xaa Xaa Cys Asp Asp Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 371
 <211> 310
 <212> DNA
 <213> Conus consors

<400> 371
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgttt 60
 gcttctgttt ccccttactg ctcttccaat ggatggagat caatctgtag accgacctgc 120
 agagcgtatg caggacgaca tttcatctga gctgcacccc ttgttcaatc agaaaagaat 180
 gtgttgcggc gaaggtgcgc catgccccag ctatttcaga aacagtcaga tttgtcattg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttcgttatca cgactaatga ataagtaaaa 300
 tgattgcagt 310

<210> 372
 <211> 74
 <212> PRT
 <213> Conus consors

<400> 372
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Leu His Pro Leu Phe
 35 40 45

Asn Gln Lys Arg Met Cys Cys Gly Glu Gly Ala Pro Cys Pro Ser Tyr
 50 55 60

Phe Arg Asn Ser Gln Ile Cys His Cys Cys
 65 70

<210> 373
 <211> 22
 <212> PRT

<213> Conus consors

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty

<400> 373

Met Cys Cys Gly Xaa Gly Ala Xaa Cys Xaa Ser Xaa Phe Arg Asn Ser
1 5 10 15

Gln Ile Cys His Cys Cys
20

<210> 374

<211> 315

<212> DNA

<213> Conus consors

<400> 374

taagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ccatctgtct 60
gcttctgttt ccccttattg ctcttccaat ggatggagat caacctgcag accgacctgc 120
agagcgtatg caggacgaca ttcatctca gcagcatccc ttgtttgata agagaggcog 180
ctgttgcatg gtgccgaacg catgctccgg cagatgggtgc agagatcacg cacaatgttg 240
cggatgacga taacgtgttg atgaccaact ttgtgatcac ggctacatca agtgaataag 300
taaaacgatt gcagt 315

<210> 375

<211> 74

<212> PRT

<213> Conus consors

<400> 375

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Ile Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Gln Gln His Pro Leu Phe
35 40 45

Asp Lys Arg Gly Arg Cys Cys Asp Val Pro Asn Ala Cys Ser Gly Arg
50 55 60

Trp Cys Arg Asp His Ala Gln Cys Cys Gly
65 70

<210> 376

<211> 22

<212> PRT

<213> Conus consors

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 7 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Tr

<400> 376

Gly Arg Cys Cys Asp Val Xaa Asn Ala Cys Ser Gly Arg Xaa Cys Arg
 1 5 10 15

Asp His Ala Gln Cys Cys
 20

<210> 377

<211> 322

<212> DNA

<213> Conus consors

<400> 377

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggtga ctgtctgttt 60
 gcttctgttt ccccttactg ctcttccgat ggatggagat caacctgcag accaacctgc 120
 agagcgtatg caggacgaca ttcatctga gcagcatccc ttgtttgata agagacaaaag 180
 gtgttgcaact gggaagaagg ggtcatgctc cggtaaagca tgcaaaagtc tcaaagtgtg 240
 ctctggacga taacgtgttg atgaccaact ttgttatcac ggctacgtca agtgtctagt 300
 gaataagtaa aacgattgca gt 322

<210> 378

<211> 76

<212> PRT

<213> Conus consors

<400> 378

Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Asp Lys Arg Gln Arg Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly
 50 55 60

Lys Ala Cys Lys Ser Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 379

<211> 23

<212> PRT

<213> Conus consors

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 1 is Gln or pyro-Glu

<400> 379

Xaa Arg Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Ser Leu Lys Cys Cys Ser
 20

<210> 380

<211> 284
 <212> DNA
 <213> Conus emaciatus

<400> 380
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttgtctga ccactgtct 60
 gcttctgttt ccccttactg ttcttccgat ggatggagat caacctgcag acctacctgc 120
 attgctgcgc cagttctttg caactgaaca tagtcccccg ttgaccccg tcaaacgggtg 180
 ctgctcgcgc gattgcagtg ttgcatccc ttgttgcccg tatggatcac cttgattatt .240
 gcggccacgt caagtgtcta atgaataagt aaaatgattg cagt 284

<210> 381
 <211> 70
 <212> PRT
 <213> Conus emaciatus

<400> 381
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Val Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Leu Pro
 20 25 30
 Ala Leu Arg Ala Gln Phe Phe Ala Pro Glu His Ser Pro Arg Phe Asp
 35 40 45
 Pro Val Lys Arg Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Pro Cys
 50 55 60
 Cys Pro Tyr Gly Ser Pro
 65 70

<210> 382
 <211> 18
 <212> PRT
 <213> Conus emaciatus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 11, 14 and 18 is Pro or Hyp; Xaa at residue 15 is
 Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
 pho-Ty

<400> 382
 Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Xaa Cys Cys Xaa Xaa Gly
 1 5 10 15
 Ser Xaa

<210> 383
 <211> 13
 <212> PRT
 <213> Conus aurisiacus

<400> 383
 Cys Cys Lys Val Gln Cys Glu Ser Cys Thr Pro Cys Cys
 1 5 10

<210> 384
 <211> 15

108

<212> PRT
 <213> Conus atlanticus

<400> 384
 Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe Cys Val Pro Cys Cys
 1 5 10 15

<210> 385
 <211> 14
 <212> PRT
 <213> Conus arentus

<400> 385
 Cys Cys Glu Arg Pro Cys Asn Ile Gly Cys Val Pro Cys Cys
 1 5 10

<210> 386
 <211> 16
 <212> PRT
 <213> Conus bandus

<400> 386
 Cys Cys Asn Trp Pro Cys Ser Met Gly Cys Ile Pro Cys Cys Tyr Tyr
 1 5 10 15

<210> 387
 <211> 15
 <212> PRT
 <213> Conus betulinus

<400> 387
 Cys Cys Glu Leu Pro Cys His Gly Cys Val Pro Cys Cys Trp Pro
 1 5 10 15

<210> 388
 <211> 16
 <212> PRT
 <213> Conus betulinus

<400> 388
 Cys Cys Gly Leu Pro Cys Asn Gly Cys Val Pro Cys Cys Trp Pro Ser
 1 5 10 15

<210> 389
 <211> 18
 <212> PRT
 <213> Conus betulinus

<400> 389
 Cys Cys Ser Arg Asn Cys Ala Val Cys Ile Pro Cys Cys Pro Asn Trp
 1 5 10 15

Pro Ala

<210> 390
 <211> 14
 <212> PRT
 <213> Conus betulinus

<400> 390
 Cys Cys Lys Gln Ser Cys Thr Thr Cys Met Pro Cys Cys Trp
 1 5 10

<210> 391
 <211> 14

<212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa is Glu or gamma-carboxy Glu

<400> 391
 Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Pro Cys Cys
 1 5 10

<210> 392
 <211> 14
 <212> PRT
 <213> Conus betulinus

<400> 392
 Cys Cys Glu Gln Ser Cys Thr Thr Cys Met Pro Cys Cys Trp
 1 5 10

<210> 393
 <211> 18
 <212> PRT
 <213> Conus characteristicus

<400> 393
 Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Tyr Lys

<210> 394
 <211> 15
 <212> PRT
 <213> Conus characteristicus

<400> 394
 Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Lys Pro Cys Cys
 1 5 10 15

<210> 395
 <211> 17
 <212> PRT
 <213> Conus characteristicus

<400> 395
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Met
 1 5 10 15

Phe

<210> 396
 <211> 14
 <212> PRT
 <213> Conus characteristicus

<400> 396
 Cys Cys Arg Arg Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
 1 5 10

<210> 397
 <211> 16
 <212> PRT
 <213> Conus textile

<400> 397
 Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Lys Pro Cys Cys Gly
 1 5 10 15

<210> 398
 <211> 19
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa is Hyp

<400> 398
 Ser Lys Gln Cys Cys His Leu Ala Ala Cys Arg Phe Gly Cys Thr Xaa
 1 5 10 15

Cys Cys Asn

<210> 399
 <211> 15
 <212> PRT
 <213> Conus capitaneus

<400> 399
 Ser Cys Cys Arg Asp Cys Gly Glu Asp Cys Val Gly Cys Cys Arg
 1 5 10 15

<210> 400
 <211> 16
 <212> PRT
 <213> Conus coronatus

<400> 400
 Cys Cys Asp Trp Pro Cys Ile Pro Gly Cys Thr Pro Cys Cys Leu Pro
 1 5 10 15

<210> 401
 <211> 18
 <212> PRT
 <213> Conus dalli

<400> 401
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile
 1 5 10 15

Leu Ser

<210> 402
 <211> 17
 <212> PRT
 <213> Conus dalli

<400> 402
 Glx Gln Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Glu Pro Cys
 1 5 10 15

Cys

<210> 403
 <211> 16
 <212> PRT
 <213> Conus dalli

<400> 403
 Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys Thr Pro Cys Cys Trp
 1 5 10 15

<210> 404
 <211> 14
 <212> PRT
 <213> Conus distans

<400> 404
 Glx Cys Cys Val His Pro Cys Pro Cys Thr Pro Cys Cys Arg
 1 5 10

<210> 405
 <211> 14
 <212> PRT
 <213> Conus figulinus

<400> 405
 Cys Cys Pro Trp Pro Cys Asn Ile Gly Cys Val Pro Cys Cys
 1 5 10

<210> 406
 <211> 14
 <212> PRT
 <213> Conus figulinus

<400> 406
 Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Pro Cys Cys Pro
 1 5 10

<210> 407
 <211> 15
 <212> PRT
 <213> Conus figulinus

<400> 407
 Cys Cys Arg Trp Pro Cys Pro Ala Arg Cys Gly Ser Cys Cys Leu
 1 5 10 15

<210> 408
 <211> 16
 <212> PRT
 <213> Conus figulinus

<400> 408
 Cys Cys Glu Leu Ser Arg Cys Leu Gly Cys Val Pro Cys Cys Thr Ser
 1 5 10 15

<210> 409
 <211> 16
 <212> PRT
 <213> Conus figulinus

<400> 409
 Cys Cys Glu Leu Ser Lys Cys His Gly Cys Val Pro Cys Cys Ile Pro
 1 5 10 15

<210> 410
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 410

Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Val Pro
 1 5 10 15

<210> 411
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 411
 Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Leu Thr
 1 5 10 15

<210> 412
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 412

Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Val Pro
 1 5 10 15

<210> 413
 <211> 17
 <212> PRT
 <213> Conus gloriamaris

<400> 413
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Met
 1 5 10 15

Phe

<210> 414
 <211> 17
 <212> PRT
 <213> Conus gloriamaris

<400> 414
 Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Pro Cys Cys
 1 5 10 15
 Trp

<210> 415
 <211> 16
 <212> PRT
 <213> Conus gloriamaris

<400> 415
 Cys Cys Ser Trp Asp Val Cys Asp His Pro Ser Cys Thr Cys Cys Gly
 1 5 10 15

<210> 416
 <211> 13
 <212> PRT
 <213> Conus laterculatus

<400> 416
 Cys Cys Asp Trp Pro Cys Ser Gly Cys Ile Pro Cys Cys
 1 5 10

<210> 417
 <211> 19
 <212> PRT
 <213> Conus leopardus

Ala Cys Cys Glu Gln Ser Cys Thr Thr Cys Phe Pro Cys Cys
 1 5 10

<210> 424
 <211> 15
 <212> PRT
 <213> Conus nobilis

<400> 424
 Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe Cys Val Pro Cys Cys
 1 5 10 15

<210> 425
 <211> 14
 <212> PRT
 <213> Conus pulicarius

<400> 425
 Cys Cys Asn Ser Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
 1 5 10

<210> 426
 <211> 17
 <212> PRT
 <213> Conus quercinus

<400> 426
 Glx Arg Cys Cys Gln Trp Pro Cys Pro Gly Ser Cys Arg Cys Cys Arg
 1 5 10 15

Thr

<210> 427
 <211> 18
 <212> PRT
 <213> Conus quercinus

<400> 427
 Glx Arg Cys Cys Arg Trp Pro Cys Pro Gly Ser Cys Arg Cys Cys Arg
 1 5 10 15

Tyr Arg

<210> 428
 <211> 18
 <212> PRT
 <213> Conus quercinus

<400> 428
 Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Tyr Lys

<210> 429
 <211> 15
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa is Hyp

<400> 429

Cys Cys Ser Gln Asp Cys Leu Val Cys Ile Xaa Cys Cys Pro Asn
1 5 10 15

<210> 430
<211> 15
<212> PRT
<213> Conus quercinus

<220>
<221> PEPTIDE
<222> (1)..(15)
<223> Xaa is Hyp

<400> 430
Cys Cys Ser Arg His Cys Trp Val Cys Ile Xaa Cys Cys Pro Asn
1 5 10 15

<210> 431
<211> 16
<212> PRT
<213> Conus rattus

<400> 431
Glx Thr Cys Cys Ser Asn Cys Gly Glu Asp Cys Asp Gly Cys Cys Gln
1 5 10 15

<210> 432
<211> 20
<212> PRT
<213> Conus striatus

<400> 432
Glx Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys Trp Cys Arg Asp His
1 5 10 15

Ala Arg Cys Cys
20

<210> 433
<211> 12
<212> PRT
<213> Conus textile

<220>
<221> PEPTIDE
<222> (1)..(12)
<223> Xaa is Hyp

<400> 433
Cys Cys Arg Thr Cys Phe Gly Cys Thr Xaa Cys Cys
1 5 10

<210> 434
<211> 14
<212> PRT
<213> Conus tessulatus

<400> 434
Cys Cys His Lys Cys Tyr Met Gly Cys Ile Pro Cys Cys Ile
1 5 10

<210> 435
<211> 18
<212> PRT
<213> Conus tessulatus

<400> 435

Lys Cys Cys Arg Pro Pro Cys Ala Met Ser Cys Gly Met Ala Arg Cys
1 5 10 15

Cys Tyr

<210> 436

<211> 23

<212> PRT

<213> Conus betulinus

<400> 436

Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
1 5 10 15

Cys Phe Val Met Ile Thr Cys
20

<210> 437

<211> 23

<212> PRT

<213> Conus betulinus

<400> 437

Arg Cys Cys Arg Trp Pro Cys Pro Ser Arg Cys Gly Met Ala Arg Cys
1 5 10 15

Cys Phe Val Met Ile Thr Cys
20

<210> 438

<211> 15

<212> PRT

<213> Conus textile

<400> 438

Phe Cys Cys Asp Ser Asn Trp Cys His Asp Cys Glu Cys Cys Tyr
1 5 10 15

<210> 439

<211> 16

<212> PRT

<213> Conus marmoreus

<400> 439

Cys Cys His Trp Asn Trp Cys Asp His Leu Cys Ser Cys Cys Gly Ser
1 5 10 15

<210> 440

<211> 16

<212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa is Hyp

<400> 440

Asp Cys Cys Xaa Leu Pro Ala Cys Pro Phe Gly Cys Asn Xaa Cys Cys
1 5 10 15

<210> 441

<211> 16

<212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa is Hyp

<400> 441
 Cys Cys Ala Pro Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 442
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa is Hyp

<400> 442
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 443
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<400> 443
 Cys Cys Ala Pro Ser Ala Cys Arg Leu Gly Cys Arg Pro Cys Cys Arg
 1 5 10 15

<210> 444
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa is Hyp

<400> 444
 Gly Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys
 1 5 10 15

Val

<210> 445
 <211> 15
 <212> PRT
 <213> Conus textile

<400> 445
 Cys Cys Ser Trp Asp Val Cys Asp His Pro Ser Cys Thr Cys Cys
 1 5 10 15

<210> 446
 <211> 16
 <212> PRT
 <213> Conus textile

<400> 446
 Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Arg Tyr Leu Cys Cys
 1 5 10 15

<210> 447
 <211> 17
 <212> PRT
 <213> Conus aureus

<400> 447
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile
 1 5 10 15

Phe

<210> 448
 <211> 16
 <212> PRT
 <213> Conus aureus

<400> 448
 Cys Cys Asn Asp Trp Glu Cys Asp Asp Ser Cys Trp Pro Cys Cys Tyr
 1 5 10 15

<210> 449
 <211> 16
 <212> PRT
 <213> Conus ammiralis

<400> 449
 Arg Cys Cys Arg Phe Pro Cys Pro Asp Thr Cys Arg His Leu Cys Cys
 1 5 10 15

<210> 450
 <211> 12
 <212> PRT
 <213> Conus ammiralis

<400> 450
 Cys Cys Met Thr Cys Phe Gly Cys Thr Pro Cys Cys
 1 5 10

<210> 451
 <211> 18
 <212> PRT
 <213> Conus ammiralis

<400> 451
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile
 1 5 10 15

Phe Ser

<210> 452
 <211> 13
 <212> PRT
 <213> Conus ammiralis

<400> 452
 Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Pro Cys Cys
 1 5 10

<210> 453
 <211> 16
 <212> PRT

<213> Conus ammiralis

<400> 453

Cys Cys Asp Asp Ser Glu Cys Gly Tyr Ser Cys Trp Pro Cys Cys Tyr
1 5 10 15

<210> 454

<211> 16

<212> PRT

<213> Conus aulicus

<400> 454

Gly Cys Cys Ser Pro Pro Cys His Ser Ile Cys Ala Ala Phe Cys Cys
1 5 10 15

<210> 455

<211> 15

<212> PRT

<213> Conus aulicus

<400> 455

Cys Cys Arg Pro Val Ala Cys Ala Met Gly Cys Lys Pro Cys Cys
1 5 10 15

<210> 456

<211> 16

<212> PRT

<213> Conus aulicus

<400> 456

Glx Cys Cys Pro Ala Val Ala Cys Ala Met Gly Cys Glu Pro Cys Cys
1 5 10 15

<210> 457

<211> 18

<212> PRT

<213> Conus emaciatus

<400> 457

Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Pro Cys Cys Pro Tyr Gly
1 5 10 15

Ser Pro

<210> 458

<211> 16

<212> PRT

<213> Conus episcopatus

<400> 458

Cys Cys Asp Glu Asp Glu Cys Asn Ser Ser Cys Trp Pro Cys Cys Trp
1 5 10 15

<210> 459

<211> 16

<212> PRT

<213> Conus episcopatus

<400> 459

Cys Cys Asp Glu Asp Glu Cys Ser Ser Ser Cys Trp Pro Cys Cys Trp
1 5 10 15

<210> 460

<211> 15

<212> PRT

<213> Conus episcopatus

<400> 460

Cys Cys Pro Ala Ala Ala Cys Ala Met Gly Cys Lys Pro Cys Cys
1 5 10 15

<210> 461

<211> 16

<212> PRT

<213> Conus omaria

<400> 461

Cys Cys Asp Glu Glu Glu Cys Ser Ser Ala Cys Trp Pro Cys Cys Trp
1 5 10 15

<210> 462

<211> 16

<212> PRT

<213> Conus omaria

<400> 462

Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Pro Cys Cys Trp
1 5 10 15

<210> 463

<211> 12

<212> PRT

<213> Conus spurius

<400> 463

Cys Cys Pro Arg Cys Ser Glu Cys Asn Pro Cys Cys
1 5 10

<210> 464

<211> 16

<212> PRT

<213> Conus pennaceus

<400> 464

Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Lys Tyr Leu Cys Cys
1 5 10 15

<210> 465

<211> 19

<212> PRT

<213> Conus flavidus

<400> 465

Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
1 5 10 15

Cys Ser Ser

<210> 466

<211> 14

<212> PRT

<213> Conus pulicarius

<400> 466

Cys Cys Lys Leu Leu Cys Gly Cys Thr Pro Cys Cys His Ile
1 5 10

<210> 467

<211> 15

<212> PRT

<213> Conus ebraceus

<400> 467

Cys Cys Glu Gln Pro Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10 15

<210> 468

<211> 15

<212> PRT

<213> Conus ebraceus

<400> 468

Cys Cys Ala Gln Pro Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10 15

<210> 469

<211> 14

<212> PRT

<213> Conus pulicarius

<400> 469

Cys Cys Val Ser Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10

<210> 470

<211> 16

<212> PRT

<213> Conus miliaris

<400> 470

Cys Cys Asp Trp Pro Cys Ser Ala Gly Cys Tyr Pro Cys Cys Phe Pro
1 5 10 15

<210> 471

<211> 16

<212> PRT

<213> Conus miliaris

<400> 471

Gly Cys Cys Pro Pro Met Cys Thr Pro Cys Phe Pro Cys Cys Phe Arg
1 5 10 15

<210> 472

<211> 23

<212> PRT

<213> Conus rattus

<400> 472

Arg Gly Cys Cys Ala Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys Lys
1 5 10 15

Pro Ala Arg Cys Cys Gly Pro
20

<210> 473

<211> 22

<212> PRT

<213> Conus stercusmuscarum

<400> 473

Glx Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg Trp Cys Arg
1 5 10 15

Asp His Ser Arg Cys Cys
20

Ile Cys Gly Cys Cys
20

```
<210> 480
<211> 23
<212> PRT
<213> Conus circumciscus
```

```

<400> 480
Arg Lys Cys Cys Gly Lys Asp Gly Pro Cys Pro Lys Tyr Phe Lys Asp
1          5          10          15

```

Asn Phe Ile Cys Gly Cys Cys
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<210> 481
<211> 20
<212> PRT
<213> Conus ermineus
```

<400> 481
Cys Cys Ser Trp Pro Cys Pro Arg Tyr Ser Asn Gly Lys Leu Val Cys
1 5 10 15

Phe Cys Cys Leu
20

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<210> 482
<211> 21
<212> PRT
<213> Conus magus
```

<400> 482
Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Arg Asp Asn Phe
1 5 10 15

Ile Cys Gly Cys Cys
20

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<210> 483
<211> 22
<212> PRT
<213> Conus magus
```

```
<400> 483
Met Cys Cys Gly Glu Ser Ala Pro Cys Pro Ser Tyr Phe Arg Asn Ser
1          5          10          15
```

Gln Ile Cys His Cys Cys
20

```
<210> 484
<211> 22
<212> PRT
<213> Conus magus
```

<400> 484
Glx Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Thr Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys
20

<210> 485
 <211> 23
 <212> PRT
 <213> Conus magus

<400> 485
 Glx Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Arg Asp
 1 5 10 15
 Asn Phe Ile Cys Gly Cys Cys
 20

<210> 486
 <211> 23
 <212> PRT
 <213> Conus striatus

<400> 486
 Glx Lys Cys Cys Gly Glu Gly Ser Ser Cys Pro Lys Tyr Phe Lys Asn
 1 5 10 15
 Asn Phe Ile Cys Gly Cys Cys
 20

<210> 487
 <211> 22
 <212> PRT
 <213> Conus magus

<400> 487
 Glx Lys Cys Cys Ser Gly Gly Ser Cys Pro Leu Tyr Phe Arg Asp Arg
 1 5 10 15
 Leu Ile Cys Pro Cys Cys
 20

<210> 488
 <211> 23
 <212> PRT
 <213> Conus stercusmuscarum

<400> 488
 Glx Lys Cys Cys Gly Pro Gly Ala Ser Cys Pro Arg Tyr Phe Lys Asp
 1 5 10 15
 Asn Phe Ile Cys Gly Cys Cys
 20

<210> 489
 <211> 22
 <212> PRT
 <213> Conus consors

<400> 489
 Met Cys Cys Gly Glu Gly Ala Pro Cys Pro Ser Tyr Phe Arg Asn Ser
 1 5 10 15
 Gln Ile Cys His Cys Cys
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<210> 490
 <211> 23
 <212> PRT
 <213> Conus aurisiacus

<400> 490
 Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 491
 <211> 23
 <212> PRT
 <213> Conus aurisiacus

<400> 491
 Glx Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 492
 <211> 23
 <212> PRT
 <213> Conus bullatus

<400> 492
 Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Glu Cys Gly Arg Trp Cys
 1 5 10 15

Arg Asp His Ser Arg Cys Cys
 20

<210> 493
 <211> 23
 <212> PRT
 <213> Conus bullatus

<400> 493
 Val Gly Asp Arg Cys Cys Lys Gly Lys Arg Gly Cys Gly Arg Trp Cys
 1 5 10 15

Arg Asp His Ser Arg Cys Cys
 20

<210> 494
 <211> 24
 <212> PRT
 <213> Conus bullatus

<400> 494
 Val Gly Glu Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys Gly Arg Trp
 1 5 10 15

Cys Arg Asp His Ser Arg Cys Cys
 20

<210> 495
 <211> 26
 <212> PRT
 <213> Conus bullatus

<400> 495
 Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg Gly Cys Ser
 1 5 10 15

Arg Trp Cys Arg Asp His Ser Arg Cys Cys

20

25

<210> 496
 <211> 25
 <212> PRT
 <213> Conus bullatus

<400> 496
 Val Gly Cys Cys Arg Pro Lys Pro Asn Gly Gln Met Met Cys Asp Arg
 1 5 10 15

Trp Cys Glu Lys Asn Ser Arg Cys Cys
 20 25

<210> 497
 <211> 22
 <212> PRT
 <213> Conus characteristicus

<400> 497
 Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Pro Gln Arg Cys Cys Ala
 20

<210> 498
 <211> 23
 <212> PRT
 <213> Conus lynceus

<400> 498
 Gly Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Arg Asp Arg Ala Cys
 1 5 10 15

Lys Pro Gln Arg Cys Cys Gly
 20

<210> 499
 <211> 22
 <212> PRT
 <213> Conus lynceus

<400> 499
 Glx Arg Leu Cys Cys Gly Phe Pro Lys Ser Cys Arg Ser Arg Gln Cys
 1 5 10 15

Lys Pro His Arg Cys Cys
 20

<210> 500
 <211> 22
 <212> PRT
 <213> Conus laterculatus

<400> 500
 Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Arg Asp Arg Gln Cys Lys
 1 5 10 15

Pro Ala Arg Cys Cys Gly
 20

<210> 501
 <211> 22
 <212> PRT

<213> Conus laterculatus

<400> 501

Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys Glu Ser Cys
1 5 10 15

Met Arg Lys Ala Cys Cys
20

<210> 502

<211> 22

<212> PRT

<213> Conus laterculatus

<400> 502

Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys Glu Ser Cys
1 5 10 15

Lys Arg Lys Ala Cys Cys
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<210> 503

<211> 22

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa is Hyp

<400> 503

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys
1 5 10 15

Xaa Gln Arg Cys Cys Ala
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<210> 504

<211> 22

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa is Hyp

<400> 504

Arg Asp Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Arg Cys Lys
1 5 10 15

Xaa Met Lys Cys Cys Ala
20

<210> 505

<211> 22

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa is Hyp

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Arg Cys Lys
1 5 10 15

<210> 506

<211> 22

<212> PRT

<213> Conus purpurascens

 $\langle 220 \rangle$

<221> PEPTIDE

<222> (1) .. (22)

<223> Xaa is Hyp

<400> 506

Glx Arg Leu Cys Cys Gly Phe Xaa Lys Ser Cys Arg Ser Arg Gln Cys
1 5 10 15

Lys Xaa His Arg Cys Cys
20

<210> 507

<211> 22

<212> PRT

<213> Conus magus

<400> 507

Arg	Asp	Cys	Cys	Thr	Pro	Pro	Lys	Lys	Cys	Lys	Asp	Arg	Gln	Cys	Lys
1				5					10					15	

Pro Gln Arg Cys Cys Ala
20

<210> 508

<211> 24

<212> PRT

<213> Conus marmoreus

<400> 508

Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys
1 5 10 15

Lys Pro Ala Arg Cys Cys Gly Pro
20

<210> 509

<211> 23

<212> PRT

<213> Conus nobilis

<400> 509

Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
20

<210> 510

<211> 24

<212> PRT

<213> Conus parius

```
<210> 511
<211> 23
<212> PRT
<213> Conus parius
```

<210>	512
<211>	24
<212>	PRT
<213>	Conus radiatus

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<400> 512
Leu Xaa Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Xaa Val Xaa Ala
1          5          10          15
```

```
<210> 513
<211> 24
<212> PRT
<213> Conus radiatus
```

<400> 513
Glx Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Xaa Val Xaa Ala Cys
1 5 10 15

```
<210> 514
<211> 24
<212> PRT
<213> Conus radiatus
```

```

<400> 514
Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys
1          5          10          15

Lys Pro Ala Arg Cys Cys Gly Pro
          20

```

<210> 515
 <211> 23
 <212> PRT
 <213> Conus stercusmuscarum

<400> 515
 Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 516
 <211> 21
 <212> PRT
 <213> Conus tulipa

<220>
 <221> PEPTIDE
 <222> (1)..(21)
 <223> Xaa is Hyp

<400> 516
 His Gly Cys Cys Lys Gly Xaa Glu Gly Cys Ser Ser Arg Glu Cys Arg
 1 5 10 15

Xaa Gln His Cys Cys
 20

<210> 517
 <211> 21
 <212> PRT
 <213> Conus tulipa

<400> 517
 His Gly Cys Cys Glu Gly Pro Lys Gly Cys Ser Ser Arg Glu Cys Arg
 1 5 10 15

Pro Gln His Cys Cys
 20

<210> 518
 <211> 23
 <212> PRT
 <213> Conus wittigi

<400> 518
 Leu Pro Ser Cys Cys Asp Phe Glu Arg Leu Cys Val Val Pro Ala Cys
 1 5 10 15

Ile Arg His Gln Cys Cys Thr
 20

<210> 519
 <211> 17
 <212> PRT
 <213> Conus omaria

<400> 519
 Cys Cys Lys Tyr Gly Trp Thr Cys Leu Leu Gly Cys Thr Pro Cys Asp
 1 5 10 15

Cys

<210> 520

<400> 520

Cys